NMP1-IST-001

NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT NUCLEAR STATION UNIT 1

PUMP AND VALVE SECOND TEN-YEAR
INSERVICE TESTING PROGRAM PLAN

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Summary of Pages
Revision 03 (11-2-, 1992)

Major Rewrite
Approved Change Requests

PUMP AND VALVE
(IWP, IWV)

NIAGARA MOHAWK POWER CORPORATION

NMP1 IST PROGRAM PLAN
NMP1-IST-001, REV 3

REVISION 3 SUMMARY SHEET

Description of Change	Reason for Change
The following changes are incorporated into this revision: A. Various Change Requests, CR-001 through CR-021 and 1-92-IST-002 (see attached detailed list summarizing each Change Request).	To accomodate and restart of activities of NMP1 1989/1990
B. Response to NRC SER dated March 7, 1991 (TAC No. 60450) and NMPC response Ref. NMPC letter to NRC, and Change Requests 1-91-IST-002, 003, 004 and 008 (see attached detailed list summarizing each Change Request.	NMPC requested to resolve all NRC comments and/or concerns.
C. Approved Relief Requests per NRC SER dated September 22, 1992 dated September 22, 1992 (TAC Nos. M81833 and M83539) the approved Relief Requests 1-91-IST-001, 005, 007 and 1-92-IST-001.	To reflect design changes and to be consistent with Operation and Design document.
D. Change general OPS numbers with a unique EPN number per up to date approved and issued DCRs, and Design Basis Reconstitution.	IST program tests only pumps and valves which have been evaluated and classified SR active.
E. Delete test requirement for valves considered safety-related passive per App. B determination and plan Q list and add those valves to the Exclusion/Justification section, Appendix A, Ref. Mike Mosier memo to A. Egap, dated August 28 and September 4, 1991.	For clarity, friendly use, and to be consistent with the IST Program of NMP2.
F. Overall rewrite and reformat of valve test tables and change of database (text) to WordPerfect and tables to R-Base.	To be consistent with NMP2 and to make it part of the NMP1 IST Program Plan.
G. This revision incorporates and supercedes the Exclusion/ Justification document NMP1-IST-002 and change it to NMP1-IST-001, Appendix A.	Code requirements are not practical and/or associated with hardships. Proposed alternate testing.

SUMMARY SHEET ATTACHMENT

Note 1 : All of the following Change Requests are prefixed with ISI/IST CR#1-XX-IST-XXX, where "XX" represents the year and "XXX" is a sequential number.

Note 2 : All column information is taken from the Change Request cover sheet.

CR No.	Date	Pump/Valve	Component ID
CR90-001	2/ 2/90	EDGCW Pumps	(79-53 & 64)
CR90-002	2/ 8/90	EDGFOT Pumps	82-40 & 41
CR90-003	2/23/90	CRD Scrm. Vlvs. EC Chk. Valves	44.2-15&18 39-03 & 04
CR90-004	2/23/90	CRD Cool. Wtr. Chk. Vlvs.	138
CR90-005	4/ 2/90	SFSPFC Valves	54-49 & 18
CR90-006	5/12/90	RBCLCW Control Valves	70-137,72-146
CR90-007	4/ 4/90	IAS RPV Hd. Leak Det.	IA-25 & 26
CR90-008	4/ 5/90	RCU Vacuum Breakers	63.2-01 & 02
CR90-009	4/ 6/90	Cont. Spray Inter. Vlvs.	80-45 & 40
CR90-011	5/ 3/90	Liquid Poison Pumps	NP02A & B
CR90-012	5/ 3/90	N_2 Supply #12 EPN Chngs. Vlvs.	SSI-35 & 37
CR90-013	5/15/90	Gas Purge, H_2O_2 Valves	Several
CR90-014	5/15/90	H_2O_2 Valves	201.2-413 & 414
CR90-015	5/16/90	App. J, 10CFR50 Test Pgm Chngs.	21 Valves
CR90-016	5/12/90	Cont. Spray Check Valves	Several
CR90-017	8/30/90	Text Changes EFV Valves	EFV
CR90-018	7/31/90	MSIV Fail Safe Test	01-03 & 04
CR90-019	7/31/90	RBHVAC Valve	202-47
CR90-020	8/29/90	EDGFOT Pumps	82-40 & 41
CR90-021	9/12/90	Cont. Spray Valves	80-05 & 06,25, and 26
		VG-2 Trending	LA Valves
CR91-001	6/19/91	ADS Valves (MS-RR-1)	NR108A,B,C,D,E & F
CR91-002	7/29/91	Cont. Spray Disch. Chk. Vlvs.	80-05,06,25,26
CR91-003	7/29/91	RBCLCW-RR-1	70-MU-73 & 70-257
CR91-004	8/23/91	Cont. & Core Spray Intertie Check Valves	93-58,60,62,64
CR91-005	8/16/91	Core Spray Check Valves (CS-RR-1)	40-03,40-13,81-07, 81-08,81-27 & 81-28
CR91-007	8/16/91	Cont. Spray Check Valves (CTS-RR-2)	80-05,80-06,80-25 & 80-26
CR91-008	9/17/91	EDFOT Foot Valves	82-86,87
CR92-001	2/4/92	EDGCW (EDGCW-RR-1)	79-59,79-60,79-61 & 79-62
CR92-002	3/21/92	Closing out NRC/SER NCTS Commitments and other program improvements	Several

TABLE OF CONTENTS

Table of Contents (Cont'd.)

SECTION III - VALVE IST PROGRAM PLAN

PUMP AND VALVE INSERVICE TESTING PROGRAM PLAN

for

NINE MILE POINT
NUCLEAR STATION UNIT 1
(NMP1)

SECTION I - OVERVIEW

Pages I-1 through I-29

1.0 INTRODUCTION - IST PROGRAM PLAN HISTORY

This document presents the 2nd Ten-Year Program Plan for Inservice Testing (IST) of Pumps and Valves at the Nine Mile Point Nuclear Station Unit 1 (NMP1), in compliance with the requirements of 10CFR50.55a(g) and Station Technical Specification 3.2.6. This Program Plan was prepared in accordance with the rules of the ASME Boiler and Pressure Vessel Code, Section XI, 1983 Edition, Summer 1983 Addenda.

In 1983, the then-present 120-month inspection interval, which began with the issuance of the Nine Mile Point Unit 1 full-term operating license date of December 26, 1974, was scheduled to conclude at the end of 1984. Reactor recirculation piping and safe end replacement work lengthened the interval. It was to conclude at the end of the 1986 refueling outage. The IST program, which began in December 1979, was scheduled to conclude in December 1989. Niagara Mohawk voluntarily changed the IST schedule in order to make the Inservice Inspection (ISI) and IST intervals coincide (Reference C.V. Mangan, NMPC, letter to D.B. Vassello, NRC, dated September 13, 1983).

In 1985, a copy of the Second Interval IST Program was submitted to the NRC. The start of the second interval was then scheduled to be after the 1986 refueling outage (Reference C.V. Mangan, NMPC, letter to J.A. Zwolinski, NRC, dated December 11, 1985).

In December 1985, the Mechanical section of the Q-list, which contains the Quality Group classifications of various plant components, was substantially revised and reissued.

In conjunction with a September 1986 special safety inspection performed by the USNRC Region 1 office, notification of a delay in the full implementation of the Second Interval Program was given to the NRC. A revised program plan was to be submitted to incorporate items identified during the inspection (Reference C.V. Mangan, NMPC, letter Log No. NMP1L 0115, to J.A. Zwolinski, NRC, dated December 9, 1986).

In 1987, a copy of the Second Interval IST Program (Revision 0, dated 4/1/87) was submitted to the NRC. NMP1 was proceeding with the implementation, pending NRC review and acceptance of the IST Program Plan (Reference C.V. Mangan, NMPC, Letter Log No. NMP1L 0144, to NRC, dated April 2, 1987).

In early September 1987, a NRC (NRR/EG&G) meeting was held to review the Revision 0 IST Program Plan. Additional information

regarding scope of components included/excluded, test techniques, relief request clarification, cold shutdown justification review, instrumentation information was requested (Reference NRC to NMPC letter, dated March 3, 1988, "Nine Mile Point 1 Inservice Testing Program - Summary of September 9 and 10, 1987 Meeting (TAC 60450)").

In December 1987, a feedwater transient and the ensuing investigation resulted in an extended outage. On October 26, 1988, a deficiency was identified in the NMP1 First Interval IST Program. The deficiency was identified, in part, by preparing the Second Interval IST Program and in part by reviewing NRC Information Notice 88-70. The deficiency involved the omission of some Quality Group A, B, and C pumps and valves from the First Interval IST Program (Reference NMP1 LER 88-19, Inservice Testing Program not in Compliance with ASME Section XI, Resulting in Violation of Technical Specifications due to Management Ineffectiveness).

In January 1989, a copy of the Second Interval IST Program (Revision 1, dated 1/16/89) was submitted to the NRC (Reference C.D. Terry, NMPC, Letter Log No. NMP1L 0349, dated January 31, 1989).

In February 1989, additional information regarding the Raw Water Inter-Tie check valves and the Reactor Building Closed Loop Cooling water check valves was submitted (Reference C.D. Terry, NMPC, Letter Log No. NMP1L 0355, dated February 9, 1989). Also, a site meeting was held with the NRC (NRR/EG&G) to review their Revision 1 comments and to provide additional information on certain cold shutdown justifications and relief requests (Reference NRC to NMPC letter dated March 10, 1989, "Summary of Meeting with Niagara Mohawk Power Corporation on February 22 and 23, 1989 to discuss the Pump and Valve Inservice Test Interface Program for Nine Mile Point, Unit 1").

In March 1989, a copy of the Second Interval IST Program (Revision 2, dated 3/23/89) was submitted to the NRC. Revision 2 incorporated and resolved all of the comments from the February 1989 site meeting (Reference C.D. Terry, NMPC, Letter Log No. NMP1L 0376, dated March 28, 1989).

In June 1989, two Relief Requests were submitted to the NRC to clarify commitments made during the February site meeting. Several other minor editorial changes were provided (Reference C.D. Terry, NMPC, Letter Log No. NMP1L 0413, dated June 20, 1989).

These Relief Requests were incorporated into Revision 2 of the IST Program Plan (Ref. Change Request 3).

In August 1989, the USNRC indicated that the Generic Letter 89-04 (See Reference 8) eliminated the need to issue a separate interim relief and that NMP1 should continue to implement the Unit 1 IST Program as submitted through June 20, 1989 (Reference NRC to NMPC letter, TAC 60450, dated August 10, 1989, from M.M. Slosson to L. Burkhardt, "Nine Mile Point Nuclear Station Unit No. 1 Inservice Testing Program").

In January 1990, NMPC contacted the NRC to discuss a revision to Relief Request PR-2 on the Liquid Poison System. The Relief Request, which was extensively revised, did not really change the test method. The NRC agreed that this was a clarification that did not require their approval (Reference NMPC Internal Correspondence to K.B. Thomas to Unit 1 Licensing File, dated February 7, 1990, "Notes of Telecon with NRC Regarding IST Relief Request on Liquid Poison Pump). This was incorporated into Revision 2 of the IST Program Plan (Ref. Change Request 11).

In March 1990, an interim relief request to allow the use of a pump curve for the Emergency Diesel Generator Cooling Water System pumps was submitted to the NRC (Reference C.D. Terry, NMPC Letter Log NMP1L 0487, dated March 27, 1990). In June 1990, the NRC approved the interim relief request until the next outage (1992) when a throttle valve will be added to the system to permit testing in accordance with the IWP Code (Reference NRC Letter, TAC 76410, dated June 22, 1990, from R.A. Capra to L. Burkhardt, "Interim Relief Request PR-8, Emergency Diesel Generator Cooling Water System Pumps 79-53 and 79-54 (72-62 and 72-63), Nine Mile Point, Unit No. 1"). This was incorporated into Revision 2 of the IST Program Plan (Ref. Change Request 1).

In November 1990 (11/5/90, NMP1L 0541), NMPC submitted revised Relief Request CTS-RR-2 for NRC approval based on reanalysis and adjustment of Containment Spray System design flow rate from 3000 gpm to 3300 gpm, as well as revised Relief Request VG-2.

In March 1991, a safety evaluation of Second Ten-Year Interval Inservice Testing Program for pumps and valves, NMP1 (TAC No. 60450) was issued by the NRC. The SER requested NMPC to resolve certain items within various specified time periods.

On May 30, 1991, the NRC Project Manager for NMP1 contacted NMPC to discuss issuance of NRC's SER for revised Relief Requests CTS-RR-1

and VG-2. NMPC explained that recent analysis of Containment Spray System design flow rate indicated that design flow rate would again be increased from 3300 gpm to 3600 gpm and might invalidate NRC's SER. NRC informed NMPC that it would not, and NMPC would only have to notify NRC in writing if changed. NRC thereafter issued SER for CTS-RR-2 which provided interim approval of CTS-RR-2 through the 1992 refueling outage, as well as approval of revised Relief Request VG-2, as submitted (5/30/91, TAC No. 79447).

As instructed by the NRC Project Manager during a conference call on 5/30/91, NMPC notified NRC in writing on June 13, 1991 that Containment Spray System design flow rate had been increased to 3600 gpm (6/13/91, NMP1L 0588).

The NRC SER assumed that the Program Plan submitted in March 1989 covered the Second Ten-Year Inspection Interval from June 1, 1986 to June 1, 1996. However, due to the extended outage (December 1987 to June 1990), the Second Interval IST Program Plan has been extended (by 30 months) to December 1998, as allowed by IWA2420(c).

All NRC comments have been resolved and incorporated in Revision 3, as noted in Mr. C.D. Terry's letter to NRC, NMP1l, dated 10/8/91.

On September 22, 1992, a Safety Evaluation for Relief Requests Nos. MS-RR-1, CS-RR-1, CTS-RR-2 and EDGCW-RR-1 (TAC Nos. M81833 and M83539) was issued by the NRC. The approved Relief Request are incorporated in Rev. 3.

2.0 BASIS

Documents that provided the bases for component selection, test requirements, relief requests, and format for each IST Program Plan submittal were:

A. The December 1985 transmittal of the Second Interval IST Program was prepared using the reference Code Edition and Addenda and available NRC guidance (except where exemption/relief was requested) contained in "Guidance for Preparing Pump and Valve Testing Program Descriptions and Associated Relief Requests, Pursuant to 10CFR50.55a(g)" and the November 1981 Draft Regulatory Guide, "Identification of Valves for Inclusion in Inservice Testing for Pumps and Valves".

B. The April 1987 transmittal of the Second Interval IST Program additionally considered comments made during the September 1986 Special Safety Inspection performed by USNRC Region 1. This revision also had extensive NMP1 site and NMPC corporate review.

C. The January 1989 transmittal of the Second Interval IST Program additionally considered the NRC's review comments from the September 1987 meeting, the 1985 Q List revision, and additional NRC guidance provided in a draft Generic Letter on Inservice Testing, dated August 1988.

D. The March 1989 transmittal additionally considered the NRC's review comments from the February 1989 meeting.

E. The June 20, 1989 transmittal additionally considered the NRC's Generic Letter 89-04, "Guidance on Developing Acceptable Inservice Testing Programs", dated April 3, 1989, and their "Minutes of the Public Meeting on Generic Letter 89-04", dated October 25, 1989.

Regarding the inclusion of certain valves, based on their Containment/Reactor Coolant Isolation functions, this program is inclusive of valves which are categorized as Containment Isolation Valves, which require Type C testing, as specified in the latest NMPC NMP1 Appendix J, 10CFR50 Test Program.

Current NMP1 practice is to perform Containment Isolation Valve Leakage Rate Testing in accordance with the NMP1 Appendix J Type C, 10CFR50 Test Program. Any changes to the Appendix J Type C Containment Isolation Valve Program shall be incorporated into the IST Program Plan as applicable.

2.0 BASIS (Cont'd.)

The reference documents listed in Item "A" requested that maximum stroke times be provided in the IST Program Plan. NMP1 has developed implementing procedures to control the establishment and documentation of maximum stroke times. This information, which will be maintained as separate documents, is available at the site for review.

The Second Interval IST Program Plan has been fully implemented during the extended 1987-1990 feedwater transient outage.

3.0 GENERAL PROGRAM PLAN CONCEPT

ASME Section XI IWP and IWV-1100 specifies testing requirements for certain ASME Class 1, 2, and 3 pumps and valves that perform a specific function in:

A. shutting down a reactor (pump);
B. shutting down a reactor to a cold shutdown condition (valve);
C. mitigating the consequences of an accident (pump and valve);

and that are provided with an emergency power source (pumps).

The NMP1 Inservice Testing (IST) Program Plan specifies testing requirements for ASME Class 1, 2, and 3 safety-related pumps and active valves. The document used to delineate the safety function of a component and its active or passive classification is the NMP1 "Q-List". ASME Class components that were not included in the IST Program are listed in the NMP1 Pump and Valve Inservice Testing Program Plan Exclusion/Justification Document, Appendix A. A justification for the component exclusion is also provided in this document.

The ASME classification is in accordance with Reg. Guide 1.26, as delineated on the NMP1 ASME Section XI Boundary Diagrams.

The NMP1 Inservice Testing (IST) Program Plan also conservatively specifies testing requirements for:

A. certain ASME Class 1, 2, and 3 safety-related passive valves;
B. certain non-ASME Class, but safety-related active pumps and valves;
C. certain non-safety-related (ASME or non-ASME) valves.

These components are voluntarily included in the IST Program Plan based on their relative importance to nuclear safety. Where ASME Section XI requirements cannot be met for these components, test table notes (not Relief Requests) are used to denote such conditions since these components are not subject to ASME Section XI compliance or NRC review.

Any changes to the IST Program Plan that delete test requirements will be documented in the Exclusion/Justification Document to document both the change and the justification.

Section XI requires quarterly testing of components unless it is impractical to do so. This program specifies quarterly testing of pumps and valves unless it has been determined that such testing would:

A. render a safety-related system inoperable;
B. cause a reactor scram or turbine trip;
C. require significant deviations from normal operations;
D. require entry into inaccessible station areas;
E. increase the possibility of an inter-system LOCA.

Each component excluded from quarterly testing has been analyzed to determine when appropriate testing may be performed. If operation of a valve is not practical during station operation, the Code allows part-stroke exercising during normal station operation, and full-stroke exercising at cold shutdown.

Since the Code allows testing at cold shutdown, this program does not request relief for those valves for which testing is delayed until cold shutdown. The Valve IST Program Plan does provide a justification for the delay of testing until cold shutdown. These justifications are prepared in a format similar to relief requests, and are included following the Valve Test Tables for each system.

Where it has been determined that testing is not practical during station operation, or at cold shutdown, a specific relief request has been prepared. Each specific relief request provides justification for not performing the Code-required testing, and provides appropriate alternative testing.

Specific notes are also included for certain non-ASME Class, but safety-related, active pumps and valves. This was done simply to show how these components are being tested at the current time. Changes made to these notes do not require NRC approval prior to use. These components are tested under a test program specified by the owner. They may eventually be removed from the IST Program Plan and tested under an alternate Test Program.

In addition to specific relief requests, general relief requests which address specific Code requirements found to be impractical for this station have been prepared. Because of the general nature of these relief requests, and the number of components involved, they are presented in separate sections and are not repeated in the individual system sections.

Some general notes also address non-ASME Class, but safety-related, pumps and valves. Changes made to the general notes on non-ASME Class components do not require NRC approval prior to use. These components are tested under a test program specified by the owner. They may eventually be removed from the IST Program Plan and tested under an alternate Test Program.

4.0 PROGRAM PLAN ORGANIZATION

The Pump and Valve Inservice Testing Program Plan is organized into three sections:

__Section I - General__

This Section presents the general program commitment basis, the conceptual framework used in developing the Program Plan, the general relief requests for Code requirements found to be impractical, and the references used by all sections.

Because of the nature of the general relief requests (e.g., the large number of components involved), they are included in Section I and are not necessarily repeated in the individual Pump (Section II) or Valve (Section III) Tables;

__Section II - Pumps__

This Section deals specifically with the Pump Test Program. This Section contains a discussion of certain Code items, a pump drawing list, a pump table showing certain pump and measured parameter information, particular notes, and specific relief requests;

__Section III - Valves__

This Section deals specifically with the Valve Test Program. This Section contains a discussion of certain Code items which includes some definitions, table nomenclature, valve drawing list, valve test tables arranged by system with specific notes and/or relief requests in each system table. Cold shutdown justifications and specific Relief Requests are also included in each system table.

5.0 DEFINITIONS

The terms below, when used in the Inservice Testing Program Plan, are defined as follows:

QUARTERLY — An interval of 92 days for testing components which can be tested during normal plant operation

COLD SHUTDOWN — Testing deferred until cold shutdown shall commence within 48 hours of achieving cold shutdown, and shall continue until testing is complete or until the plant is ready to return to power. Completion of cold shutdown testing is not a prerequisite to return to power. Any testing not completed at one cold shutdown shall be preferentially scheduled for testing at subsequent cold shutdowns where possible. Cold shutdown testing of a component is not required if less than 92 days have passed since the last cold shutdown test of that component. For scheduled outages greater than 14 days, all cold shutdown tests shall be performed; testing does not have to commence within 48 hours.

Note 1 : The above definition of cold shutdown testing applies unless otherwise specified. For example, pressure isolation valves are leakage rate tested at cold shutdown intervals defined by NMP1 Tech. Spec. 4.2.7.1.

Note 2 : Cold shutdown test results in the "Alert Range" shall have the test frequency of the applicable component(s) increased such that testing is performed during subsequent cold shutdown if not performed during the last 45 days.

REFUELING — Testing deferred to refueling will be performed during the normal scheduled refueling shutdown before returning to power operation.

PERIOD — Category C safety and relief valves (IWV-3511), Category D explosive actuated valves (IWV-3610), and Category D rupture disks (IWV-3620) are periodically tested, as defined in the appropriate Code Subsections.

SAMPLING — Category C Check Valves which are disassembled and inspected in lieu of full exercising, as specified in associated relief requests, are tested in accordance with NRC Generic Letter 89-04, Position 2.

PRESSURE ISOLATION — Any valve which acts as an isolation boundary between the high pressure Reactor Coolant System and a system having a lower operating or design pressure, as specified in Technical Specification Section 3.2.7.1.

CONTAINMENT ISOLATION — Any valve which performs a containment isolation function and is included in the Appendix J Type C Leakage Rate Test program

ACTIVE — Any valve which is required to change position to accomplish its safety-related function

PASSIVE — Any valve which is not required to change position to accomplish its safety-related function

6.0 GENERAL RELIEF REQUESTS FOR PUMPS

This Section requests relief from specific requirements of Section XI found to be impractical for Nine Mile Point Unit 1. Since they are general in nature, and pertain to a number of components, this Section requests general relief as presented below. The relief requests do not appear in the Pump Test Table except for bearing temperature and for vibration relief requests.

General Relief Request	:	**PG-1**
Pumps	:	All
Test Requirements	:	Table IWP-3100-2 Acceptance Criteria. IWP-4120 Range, and IWP-4500 Vibration
Basis for Relief	:	Standard Industry practice is to use vibration velocity as a basis for the establishment of vibration reference values for pumps operating at normal speeds. Vibration velocity is used because it is independent of frequency in this RPM range, thus yielding a simple reliable measure of the severity of the vibration.
Alternate Testing	:	In lieu of the ASME Section XI Code-specified criteria, Nine Mile 1 performs vibration measurements in accordance with the applicable ASME/ANSI OMa-1988, Part 6, as recommended by NRC SER dated March 7, 1991 (TAC No. 60450).

General Relief Request	:	**PG-2**
Pumps	:	Emergency Service Water, Core Spray, Emergency DG Cooling Water, Containment Spray, and Containment Spray Raw Water
Test Requirements	:	Measure pump suction pressure, Table IWP-3100-1
Basis for Relief	:	Instrumentation is not installed for measuring pump suction pressure. However, the suction pressure can be calculated by measuring the level of the applicable supply (e.g., torus water level, lake level) and the elevation of the pump suction and taking the difference. The difference is the suction pressure, in feet, of head, which is then converted to pressure in pounds per square inch.
Alternate Testing	:	Calculate suction pressure from the level of the suction supply. The calculated suction pressure meets the accuracy requirements of Table IWP-4110-1 as determined by an engineering evaluation.

General Relief Request	:	**PG-3**
Pumps	:	Emergency Service Water, Core Spray, Core Spray Topping, Emergency Diesel Generator Cooling Water, Containment Spray Raw Water, Containment Spray, and Condensate Transfer
Test Requirements	:	Measure pump inlet pressure before pump startup and during the test. Table IWP-3100-1
Basis for Relief	:	These pumps use lake water or applicable tank contents as a fluid medium, and the change in supply level is negligible throughout the duration of testing.
Alternate Testing	:	Inlet pressure shall only be measured or calculated during the pump test. The calculated inlet pressure meets the accuracy requirements of Table IWP-4110-1, as determined by an engineering evaluation.

General Relief Request	:	**PG-4**
Pumps	:	All
Test Requirements	:	Measure pump bearing temperature yearly. Table IWP-3100-1
Basis for Relief	:	The measuring of bearing temperatures, along with vibration monitoring, are both means of determining the mechanical condition of a pump. However, the condition of a pump bearing would have to seriously degrade to cause a detectable rise of temperature on the bearing housing. With the improved vibration monitoring program employed at NMP1, the ability to detect very small changes in the mechanical condition of a pump exists. Therefore, any degradation of a bearing would be detected before an increase of temperature on the bearing housing occurred.
Alternate Testing	:	Pump mechanical condition will be determined by the enhanced vibration monitoring program. Bearing temperatures will not be measured.

7.0 GENERAL RELIEF REQUESTS FOR VALVES

This Section requests relief from specific requirements of Section XI found to be impractical for Nine Mile Point Unit 1. Since they are general in nature and pertain to a number of components, this Section requests general relief as presented below. These relief requests do not appear in the applicable system valve test tables.

General Relief Request	:	**VG-1**
Valves	:	Rapid acting power-operated valves with stroke times of 2 seconds or less
Category	:	A, B
Test Requirements	:	IWV-3417 requires corrective action if the measured stroke time for a valve which normally strokes in ten seconds or less increases by 50% from the last measured stroke time. IWV-3413 allows measurement to the nearest second for stroke times of ten seconds or less.
Basis for Relief	:	For rapid acting power-operated valves, the application of the above criteria could result in requiring corrective action when the valves are functioning normally. These valves are generally small power-operated valves which, because of their size and actuator types, stroke very quickly. Operating history on this type of valve indicates that they generally either operate immediately or fail to operate in a reasonable length of time. The intent of the reference Code sections is to track valve stroke time as a means of detecting valve degradation. This type of valve does not lend itself to this tracking technique.
Alternate Testing	:	For valves assigned to the rapid acting valve category, a maximum limiting value full-stroke time of 2 seconds will be assigned. If stroke times exceed these limits, the valves will be considered inoperable and corrective action initiated in accordance with IWV-3417(b).

General Relief Request	:	**VG-2**
Valves	:	Containment Isolation Valves, Pressure Isolation Valves
Category	:	A, AC
Test Requirements	:	Leak rate test in accordance with Subsection IWV-3421 through 3425 and IWV-3427(b)
Basis for Relief	:	There are three types of leakage tests performed at NMP1. These tests are designated as either LA, LJ, or LK in the test requirement column of the Valve Tables. A description of each test is contained in the following paragraphs.

Containment isolation valves (CIV's) are required to be leakage rate tested in accordance with 10CFR50, Appendix J. These valves are designated as LJ valves in the test requirement column of the Valve Tables. The leakage rate requirement is based on a total allowable leakage rate for all valves instead of an individual valve leakage rate. IWV-2200(a) defines Category A as "valves for which seat leakage is limited to a specific maximum amount in the closed position of fulfillment of their function". Although leakage rates for containment isolation valves are not limited on an individual basis, they have been determined to be Category A valves.

Since containment isolation valves are Category A, the leakage rate testing requirements of IWV-3420 must be satisfied. The leakage rate testing performed per Appendix J satisfies the intent of IWV-3421 through 3425; however, it does not satisfy the individual valve leakage rate analysis and corrective actions of IWV-3426 and IWV-3427 respectively. In order to prevent duplicate leakage testing of these valves, individual leakage rates will be obtained during Appendix J testing and the requirements of IWV-3426 and 3427(a) will be applied via separate procedure.

General Relief Request: VG-2 (Cont'd.)

The second type of leakage tests are valves that have primarily been included in the IST Program as a result of NMP1 10CFR50, Appendix J, testing commitments. These valves, which are designated as LA valves in the test requirement column of the Valve Tables, are containment isolation valves that are tested with water in accordance with IWV-3421 through IWV-3427(a) rather than with air, in accordance with 10CFR50, Appendix J.

The third type of leakage tests are pressure isolation valves. These valves are designated as LK valves in the test requirement column of the Valve Tables. They are leakage tested in accordance with NMP1 Technical Specifications Section 3.2.7.1 rather than IWV-3420. This is per Generic Letter 89-04, Position 4, which states that pressure isolation valve testing should be performed in accordance with Plant Technical Specifications and referenced as such in the IST Program.

As outlined in Generic Letter 89-04, Position 10, the usefulness of IWV-3427, "Corrective Action", Part (b) requirements does not justify the burden of compliance with this requirement for valves tested in accordance with 10CFR50, Appendix J (air leakage tests for CIV's). Relief is requested from the requirements of IWV-3427(b) for NMP1 LJ valves based on Position 10 of GL 89-04. Similarly, based on a review of NMP1 historical water leakage test results, the usefulness of IWV-3427(b) does not justify the burden of complying with this requirement for LA and LK valves.

Alternate Testing : The NMP1 leakage test programs will be conducted as follows:

1. 10CFR50, Appendix J, Containment Isolation Valve (LJ)

General Relief Request: VG-2 (Cont'd.)

Containment isolation valves will be leak rate tested in accordance with the 10CFR50 Appendix J testing program. In addition, individual valve leakage rates will be obtained by test or analysis and the requirements of IWV-3426 and 3427(a) will be applied via a separate procedure for those valves that are Appendix J, Type C tested. The trending required by IWV-3427(b) will not be performed.

2. NMP1/NRC 10CFR50, Appendix J Commitments (LA)

LA containment isolation valves will be leakage rate tested with water in accordance with ASME Section XI, IWV-3420. The trending required by IWV-3427(b) will not be performed.

3. Pressure Isolation Valves (LK)

LK pressure isolation valves will be leakage rate tested and will have corrective action taken in accordance with NMP1 Technical Specification Section 3.2.7.1 versus IWV-3420. The trending required by IWV-3427(b) will not be performed.

General Relief Request : **VG-3**

Valves : Excess Flow Check Valves (identified by instrument line below):

P&ID	EPN	Description
18020	32-204	Recirculation Pump "A" Differential Pressure
18020	32-210	Recirculation Pump "A" Differential Pressure
18020	32-215	Recirculation Pump "B" Differential Pressure
18020	32-221	Recirculation Pump "B" Differential Pressure
18020	32-226	Recirculation Pump "C" Differential Pressure
18020	32-232	Recirculation Pump "C" Differential Pressure
18020	32-237	Recirculation Pump "D" Differential Pressure
18020	32-243	Recirculation Pump "D" Differential Pressure
18020	32-248	Recirculation Pump "E" Differential Pressure
18020	32-254	Recirculation Pump "E" Differential Pressure
18020	32-125	Recirculation Pump "A" Flow
18020	32-131	Recirculation Pump "A" Flow
18020	32-138	Recirculation Pump "B" Flow
18020	32-144	Recirculation Pump "B" Flow
18020	32-151	Recirculation Pump "C" Flow
18020	32-157	Recirculation Pump "C" Flow
18020	32-164	Recirculation Pump "D" Flow
18020	32-170	Recirculation Pump "D" Flow
18020	32-177	Recirculation Pump "E" Flow
18020	32-183	Recirculation Pump "E" Flow
18020	32-64	Recirculation Pump "A" Seal Water Pressure
18020	32-70	Recirculation Pump "A" Seal Water Pressure
18020	32-76	Recirculation Pump "B" Seal Water Pressure
18020	32-82	Recirculation Pump "B" Seal Water Pressure
18020	32-88	Recirculation Pump "C" Seal Water Pressure
18020	32-94	Recirculation Pump "C" Seal Water Pressure
18020	32-100	Recirculation Pump "D" Seal Water Pressure
18020	32-106	Recirculation Pump "D" Seal Water Pressure
18020	32-112	Recirculation Pump "E" Seal Water Pressure
18020	32-118	Recirculation Pump "E" Seal Water Pressure
18015	44.1-07	Total Recirculation Flow
18015	44.1-12	Total Recirculation Flow
18015	36-125	Reactor Vessel Water Level
18015	36-130	Reactor Vessel Water Level
18015	36-135	Reactor Vessel Instrumentation
18015	36-140	Reactor Vessel Instrumentation

General Relief Request VG-3 (Cont'd.)

P&ID	EPN	Description
18015	36-145	Reactor Vessel Instrumentation
18015	36-160	Reactor Vessel Instrumentation
18015	36-165	Reactor Vessel Instrumentation
18015	36-175	Reactor Vessel Instrumentation
18015	36-170	Reactor Vessel Level
18015	36-120	Reactor Vessel Level
18015	36-48	Reactor Vessel Level
18015	36-53	Reactor Vessel Level
18002	01-76	Mainsteam Loop 11 Flow
18002	01-77	Mainsteam Loop 11 Flow
18002	01-78	Mainsteam Loop 12 Flow
18002	01-79	Mainsteam Loop 12 Flow
18017	36-62	Emergency Condenser Loop 11 Steam Flow
18017	36-57	Emergency Condenser Loop 11 Steam Flow
18017	36-67	Emergency Condenser Loop 12 Steam Flow
18017	36-72	Emergency Condenser Loop 12 Steam Flow
18007	58-07	Torus Water Level

Category : AC

Test Requirements : Valve leak rate test (IWV-3420) required testing procedure (IWV-3522) and quarterly operability testing (IWV-3521).

Basis for Relief : Excess flow check valves differ in design from conventional swing check valves in that there is no valve "disk" but, rather, a ball which functions to block flow upon initiation. Consequently, Code test requirements are impractical. The valves are used for containment isolation purposes in the event of an instrument line break outside containment.

These valves are located on instrument lines which function to provide signals relating reactor vessel conditions to station operations personnel, as well as automatic trip systems for normal and emergency operation of the station. These instruments are typically required to operate during cold shutdown conditions as well as during normal operation. Testing the excess flow check valves requires valving the corresponding instrumentation out of service. This could cause spurious instrument signal fluctuations to occur, resulting in the inadvertent automatic initiation or trip systems.

General Relief Request VG-3 (Cont'd.)

Testing the excess flow check valves during normal operation or cold shutdown conditions either imposes undue risk to plant operations and personnelsince the test medium is high pressure (normally greater than 800 psig), high temperature (approximately 200-300°F) and highly contaminated reactor coolant, or requires system intrusion to provide a test medium source. Testing during scheduled refueling outages provides adequate assurance of proper operation and satisfies the intent of Appendix J requirements associated with containment isolation.

Alternate Testing : At NMP1, high pressure excess flow check valves are tested during scheduled refueling outages with the reactor pressure at least 200 psig. Low pressure excess flow check valves are tested at the same time by removing the bonnet from an upstream isolation valve and attaching a hose/adapter that can be connected to a temporary test medium source. The test method consists of simulating a line break downstream from the check valves by opening manual drain and bypass valves which initiates flow due to reactor pressure. Verification of proper valve closure is by an audible indication (when check valve closes, a noticeable noise is generated by the hydraulic surge within the piping) by hearing a loud hammer or hammering, followed by an obvious marked decrease in the flow noise through the line. Visual observation of any flow from the drain piping is not possible since the drain line is hard piped directly to the equipment drain tank.

General Relief Request	:	VG-4
Valves	:	All power-operated valves other than rapid acting valves
Category	:	A, B
Test Requirements	:	Corrective Action, IWV-3417(a)
Basis for Relief	:	IWV-3417(a) allows an unchecked gradual degradation (stair step) process rather than fixing an allowable deviation limit from which corrective action is started.
Alternate Testing	:	Reference values shall be determined from the results of preservice testing or from the results of inservice testing. These tests shall be performed under conditions as near as practicable to those expected during subsequent inservice testing. Reference values shall only be established when the valve is known to be operating acceptably. If the particular parameter being measured can be significantly influenced by other related conditions, then these conditions shall be analyzed. Reference values will be used instead of the previous stroke time to determine acceptability in accordance with IWV-3417(a).

8.0 REFERENCES

8. 1 ASME Boiler and Pressure Vessel Code, Section XI, Rules for Inservice Inspection of Nuclear Power Plant Components, 1983 Edition, Summer 1983 Addenda

8. 2 Nine Mile Point Unit 1, Section XI Pump and Valve Inservice Testing Program Plan, 1st Interval

8. 3 Technical Specifications, Niagara Mohawk Power Corporation, Nine Mile Point Nuclear Station Unit 1, Sections 3.2.6, 3.2.7, 3.3.4, Tables 3.2.7, 3.2.7.1, 3.3.4

8. 4 Final Safety Analysis Report (Updated), Nine Mile Point Nuclear Station Unit 1

8. 5 10CFR50.55a(g), Inservice Inspection Requirements, Guidance for Preparing Pump and Valve Testing Program Descriptions and Associated Relief Requests

8. 6 Nine Mile Point Station Unit 1 "Q-List"

8. 7 Nine Mile Point Station Unit 1 ASME Section XI Boundary Diagrams

8. 8 IE Bulletin No. 83-03, Check Valve Failure in Raw Water Cooling Systems of Diesel Generators

8. 9 IE Bulletin No. 88-70, Check Valve Inservice Testing Program Deficiencies

8.10 Notes of Telecon with NRC regarding Relief Requests CTS-RR-2 and VG-2, dated May 30, 1991

8.11 N1-ISP-R-201-550, Local Leak Rate Test Summary (Type B and C Tests)

8.12 N1-ST-M4, Emergency Diesel Generators Manual Start and 1 Hour Rated Load Test

8.13 N1-ST-W14, Fire Protection System - Weekly Operation of Fire Pumps

8.14 <u>NMPC Correspondence with NRC:</u>

A. NMP1 Letter, Log No. 6777, dated June 14, 1983, from T.E. Lempges to R.C. DeYoung, "IE Bulletin No. 83-03 Response"

B. NMP1 Letter, dated September 13, 1983, from C.V. Mangan to D.B. Vassello

C. NMP1 Letter, Log No. 7947, dated December 10, 1984, from T.E. Lempges to R.C. DeYoung, "IE Bulletin No. 83-03 Response, Rev. 1"

D. NMP1 Letter, dated December 11, 1985, from C.V. Mangan to J.A. Zwolinski

E. NMP1 Letter, Log No. NMP1L 0115, dated December 9, 1986, from C.V. Mangan to J.A. Zwolinski

F. NMP1 Letter, Log No. NMP1L 0144, dated April 2, 1987, from C.V. Mangan to NRC

G. NMP1 Letter, Log No. NMP1L 0349, dated January 31, 1989, from C.D. Terry to NRC

H. NMP1 Letter, Log No. NMP1L 0355, dated February 9, 1989, from C.D. Terry to NRC

I. NMP1 Letter, Log No. NMP1L 0376, dated March 28, 1989, from C.D. Terry to NRC

J. NMP1 Letter, Log No. NMP1L 0413, dated June 20, 1989, from C.D. Terry to NRC

K. NMP1 Internal Correspondence, dated February 7, 1990, from K.B. Thomas to Unit 1 Licensing File

L. NMP1 Letter, Log No. NMP1L 0487, dated March 27, 1990, from C.D. Terry to NRC

M. NMP1 Letter, Log No. NMP1L 0541, dated November 5, 1990, from C.D. Terry to NRC

N. NMP1 Letter, Log No. NMP1L 0588, dated June 13, 1991, from C.D. Terry to NRC

O. NMP1 Letter, Log No. NMP1L 0615, dated October 8, 1991, from C.D. Terry to NRC

P. NMP1 Letter, Log. No. NMP1L 0641, dated February 7, 1992, from B. R. Sylvia to NRC (NMP1 Appendix J submittal).

8.15 NRC Correspondence with NMPC:

A. NRC Letter, TAC 65888, dated March 29, 1988, from R.A. Capra to C.V. Mangan, "Relief Request Transmitted by Letter Dated July 8, 1987 for Nine Mile Point Unit 1"

B. NRC Letter, TAC 60450, dated March 3, 1988, "Nine Mile Point 1 Inservice Testing Program - Summary of September 9 and 10, 1987 Meeting"

C. NRC Letter, TAC 54152, dated May 6, 1988, from R.A. Capra to C.V. Mangan, "Proposed Technical Specifications and Exemption Requests Related to Appendix J"

D. NRC Letter, TAC 68462, dated October 17, 1988, from R.A. Capra to C.V. Mangan, "Schedular Exemption from the Requirements of Appendix J to 10CFR50 for the Emergency Condenser Condensate Return Line Valves"

E. NRC Letter, TAC 54152, dated November 9, 1988, from M.F. Haughey to C.V. Mangan, "Review of the July 28, 1988 Letter on Appendix J Containment Leakage Rates Testing at Nine Mile Point Unit 1"

F. NRC Letter, dated March 10, 1989, "Summary of Meeting with Niagara Mohawk Power Corporation on February 22 and 23, 1989 to Discuss the Pump and Valve Inservice Test Interface Program for Nine Mile Point, Unit 1"

G. NRC Letter, TAC 60450, dated August 10, 1989, "Nine Mile Point Nuclear Station Unit No. 1 Inservice Testing Program"

H. NRC Letter, TAC 76410, dated June 22, 1990, "Interim Relief Request PR-8, Emergency Diesel Generator Cooling Water System Pumps 72-62 and 72-63"

I. NRC Safety Evaluation of Second Ten-Year Interval Inservice Testing Program for Pumps and Valves, NMP1 (TAC No. 60450), dated March 7, 1991

J. NRC Safety Evaluation of NMP1 IST Relief Requests CTS-RR-2 and VG-2 (TAC 79447), dated May 30, 1991

K. NRC Safety Evaluation of NMP1 IST Relief Requests MS-RR-1, CS-RR-1, CTS-RR-2 and EDGCW-RR-1 (TAC Nos. M81833 and M83539), dated September 22, 1992.

8.16 SER26-88, INPO: Failure of Safety Valve Due to Bonding of the Valve Disc and Seat

8.17 IE Notice No. 85-84, Inadequate Inservice Testing of Main Steam Isolation Valves

8.18 QATR-1, NMPC Quality Assurance Topical Report

8.19 USNRC, Guidance on Developing Acceptable Inservice Testing Programs (Generic Letter 89-04), dated April 3, 1989

8.20 Minutes of the public meeting on Generic Letter 89-04, dated October 25, 1989

8.21 N1-ISP-R-201-009, Instrument Line Flow Fuse Operability Check

8.22 NMP1 LER 88-19, Inservice Testing Program not in Compliance with ASME Section XI Resulting in Violation of Technical Specifications Due to Management Ineffectiveness, dated November 23, 1988

PUMP AND VALVE INSERVICE TESTING PROGRAM PLAN

for

NINE MILE POINT
NUCLEAR STATION UNIT 1
(NMP1)

SECTION II - PUMP IST PROGRAM PLAN

Pages II-1 through II-20

1.0 INTRODUCTION

This Section presents the Program Plan for Inservice Testing of safety-related ASME class Pumps at Unit 1 of the Nine Mile Point Nuclear Station, in compliance with the requirements of 10CFR50.55a. This Program Plan has been prepared to the requirements of the ASME Boiler and Pressure Vessel Code, Section XI, Subsection IWP, 1983 Edition through the Summer 1983 Addenda.

The Pump Program Plan specifies Section XI testing requirements for ASME Class 1, 2, and 3 pumps provided with an on-site emergency power source, and which are required for safety-related system operation. The pump, the test circuit, and the associated instrumentation were investigated to determine whether Section XI testing could be performed. For pumps where Code requirements are determined to be inappropriate, a specific Relief Request has been prepared. The specific Relief Requests follow the Pump Test Table. Each specific Relief Request provides justification for deviation from the Section XI specified testing, and proposes appropriate alternate testing.

This Program Plan also conservatively specifies testing requirements for the non-ASME but safety-related Emergency Diesel Generator Fuel Oil Transfer Pumps. These components are voluntarily included in the IST Pump Program Plan. As discussed in Section I, changes to any Test Table notes containing these pumps do not require NRC approval prior to use. These components are tested under a test program specified by the Owner.

Any deletions of test requirements from the IST Program Plan will be documented in the Exclusion/Justification Document.

2.0 CODE INTERPRETATION

A number of items in Subsection IWP of the Code are subject to interpretation. The interpretations of a number of general items encountered in preparing the Pump Test Program Plan are provided below.

Analysis of Data - Time Frame

Code required test parameters will be reviewed during the same shift of test performance for acceptability. If a test on an ASME Class component is underway (regardless of whether test data has been taken), and it is obvious that a gauge or a recorded value is malfunctioning or recorded improperly, the test may be halted and the instruments calibrated or the reading reverified. It should be noted, however, that in many situations where anomalous data is indicated/recorded, it may not be clear that the problem lies with the instrument or the recorded data. In these cases, the problem shall be assumed to be with the component performance. The component shall be declared immediately inoperable if test results show deviations greater than allowed (See Section XI, Table IWP-3100-2 and NMP1 General Pump Relief Request PG-1).

This position is in accordance with the intent of:

1. USNRC's Draft Generic Letter Supplement 1, Item 10;
2. USNRC's Generic Letter 90-04, Attachment 1, Position 8;
3. USNRC's Minutes of the Public Meetings on Generic Letter 89-04.

Analysis of Data - Time Frame Non-ASME Components

Test data taken on non-ASME pumps that have been voluntarily included in the IST Program Plan will be reviewed in a similar manner described for ASME components, with certain exceptions. For example, if test results exceed the established limits, a case-by-case evaluation will be performed to determine the applicable course of action. This course of action will be commensurate with the importance of the equipment to reliable and efficient plant operations. Depending on the test result evaluation, potential actions may be as follows:

1. recommend continued operation;
2. change reference value to more fully define system influences on the test results;
3. schedule maintenance at next outage;
4. issue Work Request to troubleshoot/repair the component;
5. issue Deviation/Event Report (DER) for resolution;
6. declare inoperable.

The course of action taken will be documented in the record of tests.

Scope of Tests (IWP-3300)

Subarticle IWP-3300 requires that each inservice test measure and observe all the quantities in Table IWP-3100-1. The Code assumes that each ASME Class 1, 2, and 3 pump installation can be instrumented to obtain the specified quantities. In some installations, it is not possible to provide instrumentation to obtain Code-specified quantities. For example, submerged pumps cannot be instrumented to measure inlet pressure and observation of proper lubricant level, or pressure is not possible for a greased bearing pump. In some cases, it is possible to substitute an alternate method. For example, inlet pressure for a submerged pump can be calculated by measuring the head of water relative to the pump suction. Explanatory notes and/or relief requests are included in the Pump Test Table when Section XI testing is not possible due to pump design.

Reference Values (IWP-3110)

Subarticle IWP-3110 requires that "reference values", defined as one or more fixed sets of values of the quantities shown in Table IWP-3100-1, as measured or observed when the equipment is known to be operating acceptably, be established. Reference values are established for the following test quantities: differential pressure, flow rate, and vibration at each point monitored. Since pump speed and bearing temperatures are not measured, reference values for these quantities are not established. Reference values for inlet pressure and lubrication are not established as well since these test quantities do not provide a measure of pump performance. As required by Table IWP-3100-2, Footnotes 2 and 3, acceptable limits are established for these quantities by the owner.

3.0 PUMP & SYSTEM DRAWING LIST

Pumps required for safety-related operation for NMP1 are as follows:

SYSTEM	DRAWING NO.	REV. NO.	NO. OF PUMPS
Core Spray	C-18007-C	43	4
Core Spray Topping	C-18007-C	43	4
Spent Fuel Pool Cooling	C-18008-C	20	2
Containment Spray	C-18012-C Sh. 2	36	4
Containment Spray Raw Water	C-18012-C Sh. 1	17	4
Liquid Poison	C-18019-C	20	2
Emergency Service Water	C-18022-C Sh. 1	42	2
RBCLC	C-18022-C Sh. 3	20	3
Emergency D.G. Cooling	C-18026-C Sh. 1 C-18026-C Sh. 2	12 14	1 1
Emergency D.G. Fuel Oil Transfer	C-18026-C Sh. 1 C-18026-C Sh. 2	12 14	2
C.R. Chilled Water	C-18047-C	22	2
Condensate Transfer	C-18048-C	27	2

Note: Revision numbers listed are those current based on a review performed on October 5, 1992, and may not reflect the most current drawing revision available.

4.0 PUMP TABLE NOMENCLATURE

The following abbreviations have been used in the Pump Test Table:

N	-	Rotative Speed
PI	-	Inlet Pressure (Before and after pump start)
ΔP	-	Differential Pressure
Qf	-	Flow Rate
V	-	Vibration Amplitude
Tb	-	Bearing Temperature
Q	-	Quarterly
X	-	Measurement/Observation per IWP
L	-	Lubricant Level or Pressure
PR	-	Pump Relief Request
NA	-	Non-ASME Code Class, but safety-related (e.g., non-ASME Class 1, 2, or 3 pumps)
PG	-	General Pump Relief Requests

PUMP NAME	PUMP ID	P&ID	COORD	ASME CLS	TEST FREQ	N	Pi	ΔP	Qf	V (PG-1)	Tb	L
C.R. CHILLED WATER (#11, #12)	210.1-37 210.1-36	C-18047-C	F-2 F-2	3 3	Q Q	(1) (1)	X X	(3) (3)	X X	X X	PG-4 PG-4	(2) (2)
CONDENSATE TRANSFER (#11, #12)	57-12 57-11	C-18048-C	E-5 F-5	3 3	Q Q	(1) (1)	X,PG-3 X,PG-3	(3) (3)	X X	X X	PG-4 PG-4	X X
CONTAINMENT SPRAY (#111, #112, #121, #122)	80-04 80-24 80-03 80-23	C-18012-C SH. 2	C-5 F-5 B-6 G-6	2 2 2 2	Q Q Q Q	(1) (1) (1) (1)	X,PG-2,-3,PR-7 X,PG-2,-3,PR-7 X,PG-2,-3,PR-7 X,PG-2,-3,PR-7	(3) (3) (3) (3)	PR-5 PR-5 PR-5 PR-5	X X X X	PG-4 PG-4 PG-4 PG-4	(2) (2) (2) (2)
CONTAINMENT SPRAY RAW WATER#111,#112, #121,#122	93-02 93-01 93-04 93-03	C-18012-C SH. 1	C-5 E-5 A-5 G-5	3 3 3 3	Q Q Q Q	(1) (1) (1) (1)	X,PG-2,-3 X,PG-2,-3 X,PG-2,-3 X,PG-2,-3	(3) (3) (3) (3)	PR-5 PR-5 PR-5 PR-5	X X X X	PG-4 PG-4 PG-4 PG-4	(2) (2) (2) (2)
CORE SPRAY #111, #112, #121, #122	81-23 81-24 81-03 81-04	C-18007-C	B-5 B-5 G-5 G-5	2 2 2 2	Q Q Q Q	(1) (1) (1) (1)	X,PG-2,-3,PR-7 X,PG-2,-3,PR-7 X,PG-2,-3,PR-7 X,PG-2,-3,PR-7	(3) (3) (3) (3)	PR-5 PR-5 PR-5 PR-5	X X X X	PG-4 PG-4 PG-4 PG-4	(2) (2) (2) (2)
CORE SPRAY TOPPING #111, #112, #121, #122	81-50 81-49 81-51 81-52	C-18007-C	A-4 A-4 H-4 H-4	2 2 2 2	Q Q Q Q	(1) (1) (1) (1)	X,PG-3 X,PG-3 X,PG-3 X,PG-3	(3) (3) (3) (3)	PR-5 PR-5 PR-5 PR-5	X X X X	PG-4 PG-4 PG-4 PG-4	X X X X

PUMP NAME	PUMP ID	P&ID	COORD	ASME CLS	TEST FREQ	N	Pi	△P	Qf	V (PG-1)	Tb	L
EMERGENCY SERVICE WATER (#11, #12)	72-04 72-03	C-18022-C SH. 1	C-6 D-6	3 3	PR-3 PR-3	(1) (1)	X,PG-2,-3 X,PG-2,-3	(3) (3)	PR-3 PR-3	X X	PG-4 PG-4	(2) (2)
EMERGENCY D.G. COOLING WATER (#102, #103)	79-53 79-54	C-18026-C SH. 1,2	B-6 B-6	3 3	Q Q	(1) (1)	X,PG-2,-3 X,PG-2,-3	(3) PR-8 (3) PR-8	PR-8 PR-8	X X	PG-4 PG-4	X X
EMERGENCY D.G. FUEL OIL TRANSFER (#102, #103)	82-40 82-41	C-18026-C SH. 1,2	C-2 A-2	NA(4) NA(4)	Q Q	(1) (1)	(4) (4)	(4) (4)	(4) (4)	X X	(4) (4)	(2) (2)
LIQUID POISON (#11, #12)	NP02A NP02B	C-18019-C	E-4 E-5	2 2	Q Q	(1) (1)	PR-2 PR-2	PR-2 PR-2	X X	X X	PG-4 PG-4	X X
REACTOR BLDG. CLOSED LOOP COOLING WATER (#11,#12,#13)	70-01 70-02 70-03	C-18022-C SH. 2	A-5 B-5 C-5	3 3 3	PR-1 PR-1 PR-1	(1) (1) (1)	X X X	(3) (3) (3)	X X X	X X X	PG-4 PG-4 PG-4	X X X
SPENT FUEL POOL COOLING (#11, #12)	54-01 54-02	C-18008-C	C-4 C-5	3 3	Q Q	(1) (1)	X X	(3) (3)	PR-5 PR-5	X X	PG-4 PG-4	X X

6.0 PUMP TEST TABLE NOTES

In the Pump Test Table, the test parameters to be measured or observed, and the test frequency are identified. Footnotes "1" through "4" refer to amplifications, deviations, and exceptions to the Code requirements and are further discussed below:

(1) For pumps with constant speed drive, the speed is not measured since the test will be performed at nominal motor nameplate speed as required by Section XI, IWP-3100.

(2) Lubricant level or pressure not observed because of bearing lubrication design (e.g., submerged pumps, sealed bearings).

(3) Differential pressure will be determined by using inlet (or level information) and discharge pressure measurements, as opposed to measuring it directly from differential pressure instrumentation (Reference Section XI, IWP-4240).

(4) The Diesel Generator Fuel Oil Transfer Pumps are skid-mounted components and shall use calculated flow rate and vibration only for determining pump degradation.

Pressure gauges are not going to be installed as the pump is very close to the Day Tank and the tank is vented to atmosphere. Discharge pressure is not meaningful in this application.

The Day Tank level change shall be monitored during Tech. Spec. monthly diesel testing. Once the diesel is at full load, the Day Tank will be drained down to the pump cut-in and timed to the pump cut-out. This volume change and time will be used to detect component degradation.

The acceptance criteria cannot use the recommended allowable range limits of Table IWP-3100-2 to develop allowable time margins for alert and required action. The high required action limit of 1.03% Qr is only a 0.3 to 0.4 gpm increase. This increase can easily be caused by influences <u>other</u> than pump degradation, such as:

A. tank level switch repeatability (1/4 inch is about 5 gallons, or 0.45 gpm);

B. the tank is under the diesel pedestal and the fuel oil level is subject to vibration/wave action;

C. repeatability in the tank drain down.

The change in level of the Diesel Generator Day Tank shall be used in calculating flow rate for determining pump degradation. Due to the low flow rate and the influences affecting the test, the range limits specified in the Pump Reference Value Data Set (RDS) shall be used in lieu of the recommended values of Table IWP-3100-2. Bearing temperatures are not measured in lieu of enhanced vibration testing.

Note: Because of the nature of the general relief requests, they are not necessarily referenced in the Pump Table. See Section I, General Relief Requests, PG-1 to PG-4:

PG-1	Vibration Testing
PG-2	Pump suction pressure measurement (use of level)
PG-3	Pump suction measurement (prestart and running)
PG-4	Measure bearing temperature (use of vibration)

7.0 PUMP RELIEF REQUESTS

PR-1

System	:	Reactor Building Closed Loop Cooling Water
Pump	:	70-01, 70-02, 70-03
Class	:	3
Function	:	provide cooling water to safety-related equipment
Test Requirements	:	measure inservice test quantities (IWP-3100-1) quarterly (IWP-3400)
Basis for Relief	:	The RBCLC system is not a fixed resistance system, and there are no pump test loops installed. The system flow rate and the number of pumps running are a function of the system heat loads. In most cases, it is not possible to operate the system with a single pump and align the system to achieve Code test conditions without adversely affecting plant operation.
Alternate Testing	:	Differential pressure, flow rate, and pump vibration shall be measured for each individual pump during cold shutdown. Additionally, pump vibration will be measured for each individual pump on a quarterly basis.

PR-2

System	:	Reactor Liquid Poison
Pump	:	NPO2A, NPO2B
Class	:	2
Function	:	provide a method of shutting down the Reactor without use of the Control Rods
Test Requirements	:	Measure inservice test quantities, inlet pressure, and differential pressure (IWP-3100-1)
Basis for Relief	:	Pump suction pressure is the head of water in the test tank and test lines which decreases as the tank level drops during testing. These positive displacement pumps are designed to provide a constant quantity of fluid (flow rate) at a relatively high discharge pressure (approximately 1500 psig) regardless of the suction pressure. In addition, the suction head is so small in comparison to the discharge pressure during testing of these pumps (2 psig vs. 1275 psig) that measurement of suction pressure would provide no useful information in assessing pump performance. Similarly, calculation of pump differential pressure by subtracting suction pressure from discharge pressure also provides no useful information.
Alternate Testing	:	Pump discharge pressure, flow rate, and vibration will be used in determining pump degradation. The flow rate measurement meets the accuracy requirements of IWP-4110-1.

PR-3

System	:	Emergency Service Water
Pump	:	72-03, 72-04
Class	:	3
Function	:	provide cooling water to safety-related equipment
Test Requirements	:	measure flow rate (IWP-3100-1) quarterly (IWP-3400)
Basis for Relief	:	The test line piping configuration (i.e., not enough straight runs of piping) does not allow for temporary test or permanent flow instrumentation to be installed. System heat loads prevent removing an entire service water header from service or depressurizing a header during operations or during cold shutdowns. Since the ESW pumps operate at a lower pressure than the normal service water header pressure, testing at quarterly or cold shutdown intervals is not possible. Flow instrumentation can be utilized on the Service Water System inter-tie piping to test the Emergency Service Water pumps during refueling.
Alternate Testing	:	Pump differential pressure and pump motor vibration will be used to evaluate pump performance quarterly. Pump differential pressure, flow rate, and pump motor vibration will be measured for each individual pump at refueling.

PR-5

System	:	Core Spray, Core Spray Topping, Spent Fuel Pool, Containment Spray Raw Water, Containment Spray
Pump	:	Core Spray 81-03, 81-04, 81-23, 81-24; Core Spray Topping 81-51, 81-52, 81-49, 81-50; Spent Fuel Pool 54-01, 54-02; Containment Spray Raw Water 93-01, 93-02, 93-03, 93-04; Containment Spray 80-03, 80-04, 80-23, 80-24
Class	:	2
Function	:	various
Test Requirements	:	Table IWP-4110-1, Acceptable Instrument Accuracy, requires a flow rate instrument accuracy of ± 2% of full scale.
Basis for Relief	:	NMP1 uses flow measuring instrumentation which meets the acceptable instrumentation accuracies defined in Table IWP-4110-1. The total loop accuracy was calculated from the flow device to the final readout device. The loop accuracies do not meet the instrumentation accuracies of Table IWP-4110-1 for flow rate (see the following Table for Flow Instrument Accuracies).

PUMP FLOW MEASUREMENT INSTRUMENT ACCURACIES

SYSTEM	INSTRUMENT ACCURACY	LOOP ACCURACY[1]
Core Spray System (Core Spray Topping)	0.8	2.2
Spent Fuel Pool System	1.3	2.5
Containment Spray Raw Water System	1.9	2.8
Containment Spray	1.4	2.5

The flow transmitter is well within, or meets, the accuracy limits of Section XI. The loop accuracies do not significantly exceed Section XI limits and should be sufficiently repeatable from test to test to allow for an evaluation of the pump hydraulic condition and for the detection of pump degradation.

Alternate Testing : Use the installed instruments.

[1] % of Full Scale

PR-7

System	:	Core Spray Containment Spray
Pump	:	Core Spray 81-03, 81-04, 81-23, 81-24; Containment Spray 80-03, 80-04, 80-23, 80-24
Class	:	2
Function	:	various
Test Requirements	:	Table IWP-4110-1, Acceptable Instrument Accuracy, requires a pressure instrument accuracy of ± 2% of full scale.
Basis for Relief	:	NMP1 uses level instrumentation for calculating pump inlet pressure which meets the acceptable instrumentation accuracies defined in Table IWP-4110-1. The total loop accuracy was calculated from the instrument to the final readout device. The loop accuracies do not meet the instrumentation accuracies of Table IWP-4110-1 for pressure. When the increased span (e.g., transmitter span, plus span from transmitter to pump impeller datum point) is calculated, the loop accuracy is reduced to below ± 2% of full scale. See the following Table for Level Instrument Accuracies.

PR-7 (Cont'd.)

PUMP INLET PRESSURE (LEVEL) INSTRUMENT ACCURACIES

SYSTEM	TRANSMITTER INSTRUMENT DEVICE[2]	TOTAL LOOP[3]	TOTAL LOOP INCREASED SPAN[4]
Core Spray Pi (Level Gauge)	1.2	2.4	2.0
Containment Spray Pi (Level Gauge)	1.2	2.4	2.0

The level transmitter and increased span is well within, or meets, the accuracy limits of Section XI. The total loop accuracy does not significantly exceed the Section XI limit and should be sufficiently repeatable from test to test to allow for an evaluation of pump degradation.

Alternate Testing : use the installed instruments

[2] % of Full Scale

[3] % of Full Scale

[4] % of Full Scale

PR-8

System System	:	Emergency Diesel Generator Cooling Water (EDGCW)
Pump	:	79-53, 79-54
Class	:	3
Function	:	provide cooling water to the Emergency Diesel Generator
Test Requirements	:	Inservice Test Procedure (IWP-3100), vary system resistance to fix the reference flow or the reference differential pressure; to measure inservice test quantities (Table IWP-3100-1); quarterly (IWP-3400)
Basis for Relief	:	The EDGCW system consists of two trains. Each train consists of a vertical line shaft pump and a discharge check valve located in the screenhouse, and a check valve located downstream of the diesel. The two EDGCW trains (4 inch lines) discharge to the same 6 inch header which then ties into a ten inch service water header. There are no manual valves that could be used to throttle flow.

The EDGCW was thought to be a simple fixed resistance system (i.e., constant system resistance) due to the simple hydraulic circuit configuration. EDGCW pumps were tested in the first interval program by measuring only pump discharge pressure, not flow measurements. Small deviations in the pump discharge pressure supported earlier conclusions that the EDGCW was a fixed resistance system. Early tests in the second interval dealt with establishing repeatable flow measurements (using an ultrasonic flow instrument). The reference values were established in September 1989.

PR-8 (Cont'd.)

Tests performed in October 1989 indicated a flow reduction (about 8 to 10%) with an increase in differential pressure (about 4 to 6%) compared to the reference values. This occurred in both trains. Confidence in the pressure readings and repeatability checks performed on the flow readings pointed to the backpressure of the service water header as the cause for this fluctuation. This header runs almost 300 feet, receiving discharges from several components, before it ties into the 72 inch discharge tunnel. Changing backpressure changes system resistance, thus forcing the operating point to move up and down the pump curve. The pump curve is relatively flat, meaning a large change in flow occurs for a small differential pressure. During a loss of offsite power event, this service water header would be static as the safety-related Emergency Service Water Pumps and the reactor building supply use other discharge paths. A temporary modification (installation of throttle valve) was performed to both systems in November 1989 in order to develop a baseline curve for each pump in addition to satisfying ASME XI IWP-3100 requirements. The throttle valve replaced the pump discharge check valve. At least 4 points were taken on each pump; hopwever, the throttle valve used only permitted obtaining flows below the September 1989 reference valves.

Pump	Max. Flow With Temp. Valve Installed	9/89 Reference Flow (Max)
79-53	288 gpm	305.5 gpm
79-54	296 gpm	341.4 gpm

Use of the temporary throttle valve causes the respective Emergency Diesel Generator to be inoperable during the course of this test (approximately 12 hours) which is undesirable during plant operation. In addition, this testing method would require several initiations of the diesel generators, increasing mechanical wear.

PR-8 (Cont'd.)

Alternate Testing :

For quarterly tests, a fixed reference value is not obtainable due to the lack of a permanent throttle valve. After the system is determined to be stable, both differential pressure and flow will be measured or determined. The hydraulic acceptance criteria shall use the IWP Table 3100-2 limits applied from the upper bound (highest obtainable test point) to the lower bound (determined by analysis that considers diesel heat exchanger heat transfer, fouling factors, EDG power output, and lake temperature). Test points falling within this region shall be evaluated in accordance with IWP-3230. Vibration readings will also be taken and used to evaluate pump degradation.

During cold shutdowns, the temporary throttle valve will be installed to fix a particular reference value in order to perform code-required testing.

During the next refueling outage, the modification to install a permanent throttle valve will be completed.

PUMP AND VALVE INSERVICE TESTING PROGRAM PLAN

for

NINE MILE POINT
NUCLEAR STATION UNIT 1
(NMP1)

SECTION III - VALVE IST PROGRAM PLAN

Pages III-1 through III-16

1.0 INTRODUCTION

This Section presents the Program Plan for Inservice Testing of ASME Code Class 1, 2, and 3 safety-related active valves at Unit 1 of the Nine Mile Point Nuclear Station, in compliance with the requirements of 10CFR50.55a. This Program Plan has been prepared to the requirements of the ASME Boiler and Pressure Vessel Code, Section XI, Subsection IWV, 1983 Edition through the Summer 1983 Addenda.

This Valve Test Program Plan was developed to assess the operational readiness of ASME Code Class 1, 2, and 3 active valves in safety-related systems. The ASME Code Class 1, 2, and 3 valves addressed are those for which operability is essential to safety-related system operation. Section XI testing is then specified for each of these valves to verify individual valve operational readiness. When Section XI testing cannot be performed, the Program Plan specifies alternate testing through specific Relief Requests.

This Valve Program Plan also conservatively specifies testing requirements for:

A. certain ASME Class 1, 2, and 3 safety-related passive valves;
B. certain non-ASME Class, but safety-related, active valves; and
C. certain non-safety-related (ASME or non-ASME) valves.

These components are voluntarily included in the IST Program Plan based on their relative importance to nuclear safety. Where ASME Section XI requirements cannot be met for these components, test table notes (not relief requests) are used to denote such conditions since these components are not subject to ASME Section XI compliance or NRC review.

As discussed in Section I, changes to any Test Table notes or Cold Shutdown Justification containing these valves do not require NRC approval prior to use. These valves are tested under a test program specified by the owner.

Any deletion of test requirements from the IST Program Plan will be documented in the Exclusion/Justification Document.

2.0 CODE INTERPRETATION

A number of items in Subsection IWV of the Code are subject to interpretation. The interpretations of a number of general items encountered in preparing the Valve Test Program Plan are provided below.

Corrective Action - Time Frame:

If a valve fails to exhibit the required change of valve stem or disk position, or exceeds its specified limiting value of full-stroke time, then the valve shall be declared immediately inoperable. This position is in accordance with the USNRC's Generic Letter 89-04, Attachment 1, Position 8, and with their Minutes of the Public Meetings on Generic Letter 89-04.

Analysis of Data - Time Frame other Valves:

Test data taken on other valves (listed in items "A", "B", or "C" in Section I, Page III-2) that have been voluntarily included in the IST Program Plan will be reviewed in a similar manner described for ASME components, with certain exceptions. For example, if test results exceed the established limits, a case-by-case evaluation will be performed to determine the applicable course of action. This course of action will be commensurate with the importance of the equipment to reliable and efficient plant operations. Depending on the test result evaluation, potential actions may be as follows:

A. recommend continued operation;
B. change reference value to more fully define system influences on the rest results;
C. schedule maintenance at next outage;
D. issue Work Request to troubleshoot/repair the component;
E. issue Deviation/Event Report (DER) for resolution;
F. declare inoperable;
G. increase test frequency.

The course of action taken will be documented in the record of tests.

Relief Valves:

The Code requires testing of safety and relief valve set pressure in accordance with ASME PTC 25.3-1976. The relief valves designated for test are those which perform a system pressure relief function. Test personnel qualifications shall be in accordance with NMPC Quality Assurance Topical Report (QATR-1).

Passive Valves:

The reference Code excludes valves used only for operating convenience and/or maintenance testing. This program defines passive valves as those which do not have to change position to accomplish its safety-related function.

System Test Valves:

Power-operated valves which receive an automatic initiation signal that are used to align a system for testing purposes, are also included for Section XI.

The reference Code excludes valves which perform system control functions (such as pressure regulating valves). This program excludes them unless they also perform a system safety-related response function such as a required fail-safe position. The control valves that are required to perform a required function were determined by reviewing the USAR, Chapter XV, Item 3.22, Instrument Air Failure. Other control valves not required or not testable are listed in the NMP1 Exclusion/Justification Document. The Program addresses these valves by specifying testing to all applicable Code requirements. These requirements are all satisfied during the fail safe testing (e.g., Exercise, stroke time, and position indication shall be accomplished during the fail safe test). Applicable references are listed in Section 1.8.

Automatic Power-Operated Valves:

Power-operated valves which receive an automatic signal on system initiation are included in the program.

Remote Power-Operated Valves:

The Program includes power-operated valves activated by remote switches if they are required to change position to align a system for safety-related operation, or to provide containment isolation.

Dual Function Valves:

Valves which provide more than one function are tested for their safety-related function only. Valves with multiple safety-related functions are tested for each function. Examples are the automatic depressurization valves which open and close in response to either an automatic or remote manual signal and also act as relief valves. Both are safety-related functions, and testing for both functions is included in the Program.

Simple Check Valves:

This Program Plan considers any check valve to be a simple check valve if it has no means of changing position other than by fluid flow. Simple check valves are tested to verify proper valve operation in the safety-related flow direction. Normally closed simple check valves which must open are tested to verify that the valve can pass the maximum required accident flow. Normally open simple checks which must close on cessation of flow are tested to verify closure on reverse flow. Normally closed simple check valves which are considered active and remain closed on system initiation are tested to verify absence of reverse flow. Normally open simple check valves which are required to remain open are tested to verify that the valve can pass the maximum required accident flow. Simple check valves which are required to cycle open and closed are tested to verify that the valve can pass the maximum required accident flow and closure on loss of forward flow per GL 89-04, Position 1, 1st Para..

Manual Stop Check Valves:

Manual stop check valves are tested to verify operability in the safety-related flow direction. If the manual operator is withdrawn, the valve operates as a simple check in the forward flow direction and is tested as a simple check. Reverse flow closure is verified as a simple check, if possible, or by use of the manual operator.

Testable Check Valves:

Check valves equipped with manual exercisers will be tested as a simple check, or by exercising using the manual exercising device. Check valves equipped with a power operator installed for the sole purpose of exercising the valve for operability will be tested as a simple check, or by measuring the required torque to exercise the valve.

Excess Flow Check Valves:

Excess Flow check valves (see VG-3) are tested by simulating a line break downstream from the check valves by opening manual drain and bypass valves to initiate flow. Valve closure is determined by audible indication as visual observation of flow cessation is not possible as drain piping is hard piped. The excess flow check valves are listed in the Valve Tables and in VG-3.

Power-Operated Stop Check Valves:

Testing of power-operated stop check valves is based on the function of the operator. If the valve operator is always withdrawn, and the valve operates as a simple check valve except during maintenance, the valve is tested as a simple check. If the operator is normally withdrawn, such that the valve operates as a simple check in the forward direction, and the operator provides positive closure, it is tested as a simple check in the forward direction and exercised closed, using the operator. In addition to exercising, the operator will be timed and fail safe actuation tested as appropriate.

Pump Discharge Check Valves:

As a minimum, pump discharge check valves in safety-related systems will be forward flow exercised. In addition, reverse flow closure will be verified when failure of the valve to close could result in a reduction of system performance. Such a potential exists with parallel pumps connected to common suction and discharge headers. If the check valve on the idle pump fails to close, system flow could be diverted back through the idle pump to the suction header.

System Piping Keep Fill Check Valves:

Keep fill lines are those lines attached to ECCS piping whose function is maintenance of system water inventory to preclude water hammer. Reverse flow closure verification is performed only if failure of the valve to close could result in a reduction of ECCS operation.

Check Valve Full/Partial Stroke:

In most cases, maximum accident condition flow through a check valve requires less than full mechanical valve movement. As used in this Program, the term "full stroke" refers to the ability of

the valve to pass maximum accident condition flow, and not the full mechanical stroking. Forward flow full stroke testing will be by any method that verifies the valve is capable of passing maximum accident condition flow. Tests that verify less than maximum accident condition flow capability are considered as partial stroke tests.

Category A (Containment Isolation Valve) Leak Testing:

Valves specified for Appendix J Type C leakage rate testing are included in the Valve IST Program as Category A valves. A Relief Request (see VG-2) has been included to perform the Appendix J Type C testing in lieu of testing specified in IWV-3420. This Relief Request exempts the need to perform margin and projection calculations. The Program Plan reflects the current list of valves receiving Appendix J Type C testing. Future changes to the Appendix J Type C Program will be incorporated into the Valve IST Program.

Category A (Pressure Isolation Valve) Leak Testing:

Valves which perform a pressure isolation function between the Reactor Coolant System and a low pressure system are included in the Valve IST Program as Category A valves. These valves are tested to the requirements specified in NRC-approved General Relief Request VG-2 (Ref. NRC SER TAC No. 79447).

Category A (Containment and Pressure Isolation Valve) Leak Testing:

Valves which perform both a containment isolation and a pressure isolation function (Event V only) are included in the Valve IST Program Plan as Category A Valves. These valves are tested to the requirements of both Appendix J and Section XI, except as specified in NRC-approved General Relief Request VG-2 (Ref. NRC SER TAC No. 79447).

Valve Timing:

NMP1 implementing procedures have been prepared to control the establishment and documentation of maximum stroke times. These documents are available at the site for review.

Some power-operated valves are grouped together on a common control switch. This arrangement has a common close light for a pair of valves and individual open lights for each valve (e.g., three lights per valve pair). Up to 4 pair (8 valves total) may be grouped together. The IST valve stroke time test uses one timing device to record the longest stroke time for all the valves in the group (e.g., switch to last red light out for open-to-close and switch to last green light out for close-to-open). The valve set that was used for the stroke time test will also be recorded. Valves tested as a group will be identified in the Valve Test Tables.

Valve Position Indicator Verification:

IWV-3300 requires that valves with remote position indicators shall be observed at least once every two years to verify that valve operation is accurately indicated. This program tests active valves equipped with remote position indicators in accordance with IWV-3300. Verification of proper remote position indicator operation will be performed during each refueling outage.

Valve Fail Safe Testing:

IWV-3415 requires proper operation of valves equipped with Fail Safe Actuators to be observed. For NMP1, this is generally accomplished by placing the control to the position which de-energizes the actuator and observing proper valve operation. In cases where operation of normal valve controls does not de-energize the valve actuator, alternate means will be adopted to simulate loss of actuator power.

3.0 VALVE TEST TABLE - NOMENCLATURE

The Valve Program Tables (Section III) provide a tabulation of valves (see Section I, Item 3) included in the NMP1 Valve IST Program.

The Tables are arranged by systems. Within the System, valves are grouped on pages based on their drawing (P&ID).

VALVE TABLE FORMAT

Note: The numbers in parentheses correspond to those found on the sample valve IST Program Table that is shown on Page 12.

(1)	System	:	The system that the particular Table applies to
(2)	Drawing No.	:	The P&ID that the valve is located on
(3)	Valve No. and Description	:	unique number assigned to each valve and a description of the valve's function within the system
(4) (5)	Class and Dwg. Coord.	:	The ASME valve classification (Class 1, 2, or 3) or non-ASME valve classification (NA), and the valve location on the reference drawing
(6)	Valve Category	:	valve category as defined in Subarticle IWV-2200
(7) (8)	Size (in.) and Type	:	Valve size is the nominal diameter of the valve in inches. Valve type is the specific type of valve, as abbreviated in Section 4.0 Valve Table Codes.
(9)	Actuator Type	:	The type of actuator used to operate the valve

3.0 Valve Test Table Nomenclature (Cont'd.)

(10) Valve Positions :

A. NRM - position during normal plant operation

B. SAF - position to fulfill safety function

C. FAL - position valve fails to on loss of electrical power

Note: Positions are generally either "O" for open or "C" for close, or a combination; however, any valve position shown on the abbreviation sheet can be used. Check valve directions are also shown as open and closed in this field, yet they resort to "F" for forward and/or "R" for reverse in ASME Section XI or IST Program Plan fields.

(11) ASME Section XI Test/Freq/Dir : The testing requirement, frequency the test must be performed and, in parenthesis, either the direction(s) stroke time should be measured for power-operated valves, or the direction(s) the valve should be exercised for check valves. This column identifies ASME Section XI Code requirements. The IST Program Plan Commitment column will reflect the same test requirements unless alternate testing is provided by relief request or cold shutdown test justification.

Format for the field is as follows:

Test Code - Frequency Code (stroke time or exercise direction) e.g., FE-Q (F&R) = Full stroke exercise quarterly in the forward and reverse flow direction; ST-C(O) = measure valve stroke time in the open direction during cold shutdowns; FE-R(R) = full stroke exercise during a refueling outage in the reverse direction.

3.0 Valve Test Table Nomenclature (Cont'd.)

(12) Relief Req./C.S. Just.	:	indicates whether or not there is a relief request, or cold shutdown test justification applicable. This column identifies the specific relief request or cold shutdown test justification.
(13) IST Program Plan Commitment - Test/ Freq/Dir	:	This column reflects the actual testing to be performed as required by ASME Section XI or as written relief was requested. This column also reflects testing as required by Cold Shutdown Justifications. This column reflects the total program commitment for the valve.
(14) Remarks	:	Key to notes providing amplifying remarks. These notes are located immediately following the appropriate Valve Test Tables.

SECOND TEN-YEAR INTERVAL
NINE MILE POINT NUCLEAR POWER STATION - UNIT 1

MO/DAY/YR
SYSTEM: 1
DWG. NO.: 2

VALVE NO.	CLASS AND COORD.	VALVE (CAT.)	SIZE AND TYPE	ACTU TYPE	POSITIONS NRM SAF FAL	ASME SECT. XI TEST/FREQ/DIR	REL. REQ. C.S. JUST.	IST PGM. PLN. COMMITMENT TEST/FREQ/DIR	REMARKS
3	4 5	6	7 8	9	10	11	12	13	14

3.0 Valve Test Table Nomenclature (Cont'd.)

SYSTEM	DWG. NO.	REV. NO.*	ATTACHMENT NO.
Main Steam	C-18002-C Sh. 1 C-18015-C	30 28	1
Reactor Recirculation	C-18020-C	21	2
Control Rod Drive	C-18016-C Sh. 1 C-18016-C Sh. 2	23 23	3
Feedwater	C-18005-C Sh. 2	21	4
Core Spray	C-18007-C	43	5
Emergency Cooling	C-18017-C	43	6
Reactor Shutdown Cool.	C-18018-C Sh. 1	20	7
Containment Spray	C-18012-C Sh. 1 C-18012-C Sh. 2	17 36	8
Reactor Cleanup	C-18009-C Sh. 1	34	9
Inert Gas Purge and Fill	C-18014-C Sh. 1	47	10
Hydrogen-Oxygen Monitoring	C-18014-C Sh. 2 C-26939-C C-26949-C	38 9 12	11
TIP	C-18014-C Sh. 2	38	12
Nitrogen Supply #11	C-18014-C Sh. 3	17	13
Nitrogen Supply #12	C-18014-C Sh. 4	32	14
Reactor Bldg. HVAC	C-18013-C	23	15
Liquid Poison	C-18019-C	20	16
Spent Fuel Storage Pool Filtering & Cooling	C-18008-C	20	17
Sample	C-18041-C Sh. 7	9	18
Reactor Bldg. Closed Loop Cooling	C-18022-C Sh. 2 C-18022-C Sh. 3 C-18022-C Sh. 4 C-18047-C C-26939-C C-26949-C C-18008-C C-18041-C Sh. 7 C-18018-C Sh. 1	28 20 13 22 9 12 20 9 20	19
Condensate Transfer	C-18048-C	27	20
Torus Vacuum Relief	C-18006-C Sh. 1	28	21
Emergency Service Water	C-18022-C Sh. 3 C-18027-C Sh. 2	20 12	22

3.0 Valve Test Table Nomenclature (Cont'd.)

SYSTEM	DWG. NO.	REV. NO.*	ATTACHMENT NO.
Emerg. Diesel Gen. Cooling Water	C-18026-C Sh. 1 C-18026-C Sh. 2	12 14	23
Emerg. Diesel Gen. Air Start	C-18026-C Sh. 1 C-18026-C Sh. 2	12 14	24
Emerg. Diesel Gen. Fuel Oil Transfer	C-18026-C Sh. 1 C-18026-C Sh. 2	12 14	25
Waste Disposal	C-18045-C Sh. 7 C-18045-C Sh. 9	10 15	26
Breathing Air to Drywell	C-18578-C	3	27
Control Room Chilled Water	C-18047-C	22	28
Control Room HVAC	C-18047-C	22	29
Instrument Air	C-18011-C Sh. 2 C-18030-C Sh. 3	19 21	30
Note: Revision numbers listed are those current based on a review performed on October 5, 1992, and may not reflect the most current drawing revision available.			

4.0 VALVE TABLE CODES

Valve Type	Actuator Type
AGV - Angle Valve	APA - Air/Piston
BFV - Butterfly Valve	ADA - Air/Diaphragm
BLV - Ball Valve	EXA - Explosive
CHV - Check Valve	HOA - Hydraulic
EXV - Explosive Valve	MAA - Manual
GLV - Globe Valve	MOA - Motor
GTV - Gate Valve	NPA - Nitrogen/Piston
NDV - Needle Valve	NDA - Nitrogen/Diaphragm
PGV - Plug Valve	SEA - Self
REV - Relief Valve	SOA - Solenoid
SCV - Stop Check Valve	
TPV - Two Port Valve	
TWV - Three-Way Valve	
EFV - Flow Fuse or Excess Flow Check Valve	

Valve Position

- O - Open
- C - Closed
- LO - Locked Open
- LC - Locked Closed
- TH - Throttled
- DE - Normal position depends on system condition

Stroke Direction

- O - Closed to Open
- C - Open to Closed

Check Valve Test Direction

- F - Forward Flow
- R - Reverse Flow

4.0 Valve Table Codes (Cont'd.)

Test Requirements

DI	-	Disassembly and Inspection (possible sampling of similar valves in a group)
EX	-	Explosive Valve Test per IWV-3610
FE	-	Full Stroke Exercise Test
FS	-	Fail Safe Test
LA	-	Leak Test per Section XI (leakage function only)
LJ	-	Leak Test per Appendix J, Type C (containment isolation function only)
LK	-	Leak Test per Technical Specification 3/4.2.7.1 (pressure isolation function only)
PE	-	Partial Stroke Exercise Test
PI	-	Remote Position Indication Verification
PV	-	Passive Valve (no operability tests required)
RD	-	Rupture Disk Test per IWV-3620
RT	-	Relief Valve Test
ST	-	Stroke Time Test

Test Frequency

C	-	Testing Performed During Cold Shutdown (See "Definitions", Section I.5)
P	-	Periodically Tested During the Time Period Defined in: IWV-3511 (safety and relief valves); IWV-3610 (explosive actuated valves); IWV-3620 (rupture disks).
Q	-	Once Per 92 Days (quarterly)
R	-	Once Per Refueling Outage
RS	-	Performed during Refueling Outages on a sampling basis, as specified in the associated Relief Request

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18002-C, SH. 1
System : MAIN STEAM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
01-01 MS-INBOARD IV #1 (#111)	1 B-4	A	24.00 GLV	MOA	O	C	-	FE-Q ST-Q(C) LJ-R PI-R	CS-1	PE-Q ST-C(C) FE-C LJ-R PI-R	
01-02 MS-INBOARD IV #2 (#121)	1 D-4	A	24.00 GLV	MOA	O	C	-	FE-Q ST-Q(C) LJ-R PI-R	CS-1	PE-Q ST-C(C) FE-C LJ-R PI-R	
01-03 MS-OUTBOARD IV #3 (#112)	1 A-4	A	24.00 AGV	APA	O	C	C	FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R	CS-1	PE-Q ST-C(C) FS-C(C) FE-C LJ-R	NOTE 2
01-04 MS-OUTBOARD IV #4 (#122)	1 E-4	A	24.00 AGV	APA	O	C	C	FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R	CS-1	PE-Q ST-C(C) FS-C(C) FE-C LJ-R	NOTE 2
01-102A (NR-108A) MSERV-3 (#111)	1 B-3	B,C	6 X 8 REV	SOA	C	OC	-	FE-Q ST-Q(O,C) RT-P PI-R	RR-1	FE-R RT-P	NOTES 1,3,4

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18002-C, SH. 1
System : MAIN STEAM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
01-102B (NR-108B) MSERV-1 (#112)	1 B-2	B,C	6 X 8 REV	SOA	C	OC	-	FE-Q ST-Q(O,C) RT-P PI-R	RR-1	FE-R RT-P	NOTES 1,3,4
01-102C (NR-108C) MSERV-2 (#121)	1 C-2	B,C	6 X 8 REV	SOA	C	OC	-	FE-Q ST-Q(O,C) RT-P PI-R	RR-1	FE-R RT-P	NOTES 1,3,4
01-102D (NR-108D) MSERV-4 (#122)	1 C-3	B,C	6 X 8 REV	SOA	C	OC	-	FE-Q ST-Q(O,C) RT-P PI-R	RR-1	FE-R RT-P	NOTES 1,3,4
01-102E (NR-108E) MSERV-5 (#113)	1 B-3	B,C	6 X 8 REV	SOA	C	OC	-	FE-Q ST-Q(O,C) RT-P PI-R	RR-1	FE-R RT-P	NOTES 1,3,4
01-102F (NR-108F) MSERV-6 (#123)	1 C-3	B,C	6 X 8 REV	SOA	C	OC	-	FE-Q ST-Q(O,C) RT-P PI-R	RR-1	FE-R RT-P	NOTES 1,3,4

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18002-C, SH. 1
System : MAIN STEAM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
01-119A (NR28A) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	
01-119B (NR28B) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	
01-119C (NR28C) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	
01-119D (NR28D) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	
01-119E (NR28E) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18002-C, SH. 1
System : MAIN STEAM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
01-119F (NR28F) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	
01-119G (NR28G) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	
01-119H (NR28H) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	
01-119J (NR28J) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	
01-119K (NR28K) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	

Drawing No. : C-18002-C, SH. 1
System : MAIN STEAM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
01-119M (NR28M) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	
01-119N (NR28N) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	
01-119R (NR28R) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	
01-119S (NR28S) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	
01-119T (NR28T) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	

Drawing No. : C-18002-C, SH. 1
System : MAIN STEAM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
01-119U (NR28U) RX. HEAD PSV	1 C-1	C	6.00 REV	SEA	C	O	-	RT-P		RT-P	
01-76 MAIN STEAM	1 A-1	A,C	0.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-75R(K1)
01-77 MAIN STEAM	1 A-1	A,C	0.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-75(K2)
01-78 MAIN STEAM	1 D-1	A,C	0.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-81(K1)
01-79 MAIN STEAM	1 D-1	A,C	0.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-81(K2)

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18002-C, SH. 1
System : MAIN STEAM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
37-01 RX HEAD VENT B.V.#1	1 D-2	B	2.00 GTV	MOA	C	OC	-	FE-Q ST-Q(O,C) PI-R	CS-2	FE-C ST-C(O,C) PI-R	
37-02 RX. HEAD VENT B.V. #3	1 D-2	B	2.00 GTV	MOA	C	OC	-	FE-Q ST-Q(O,C) PI-R	CS-2	FE-C ST-C(O,C) PI-R	
37-06 RX HEAD VENT B.V.#2	1 D-2	B	2.00 GTV	MOA	C	OC	-	FE-Q ST-Q(O,C) PI-R	CS-2	FE-C ST-C(O,C) PI-R	
66-07 SRV VACUUM BKR	2 B-3	C	4.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-08 SRV VACUUM BKR	2 B-3	C	4.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	

Drawing No. : C-18002-C, SH. 1
System : MAIN STEAM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
66-09 SRV VACUUM BKR	2 B-2	C	4.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-10 SRV VACUUM BKR	2 B-2	C	4.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-11 SRV VACUUM BKR	2 D-2	C	4.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-12 SRV VACUUM BKR	2 F-3	C	4.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-13 SRV VACUUM BKR	2 D-3	C	4.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18002-C, SH. 1
System : MAIN STEAM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
66-14 SRV VACUUM BKR	2 D-3	C	4.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-15 SRV VACUUM BKR	2 D-4	C	4.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-16 SRV VACUUM BKR	2 D-3	C	4.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-17 SRV VACUUM BKR	2 B-3	C	4.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-18 SRV VACUUM BKR	2 B-3	C	4.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	

Drawing No. : C-18002-C, SH. 1
System : MAIN STEAM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
66-25 SRV VACUUM BKR	2 B-3	C	10.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-26 SRV VACUUM BKR	2 B-3	C	10.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-27 SRV VACUUM BKR	2 B-2	C	10.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-28 SRV VACUUM BKR	2 B-2	C	10.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-29 SRV VACUUM BKR	2 D-2	C	10.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18002-C, SH. 1
System : MAIN STEAM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
66-30 SRV VACUUM BKR	2 D-2	C	10.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-31 SRV VACUUM BKR	2 D-3	C	10.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-32 SRV VACUUM BKR	2 D-3	C	10.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-33 SRV VACUUM BKR	2 D-4	C	10.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-34 SRV VACUUM BKR	2 D-4	C	10.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	

Drawing No. : C-18002-C, SH. 1
System : MAIN STEAM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
66-35 SRV VACUUM BKR	2 B-3	C	10.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	
66-36 SRV VACUUM BKR	2 B-3	C	10.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	FE-R(F,R)	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18015-C
System : MAIN STEAM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
36-120 REACTOR VESSEL LEVEL	2 C-3	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-53
36-125 REACTOR VESSEL WTR LEVEL	1 F-3	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-71A
36-130 REACTOR VESSEL WTR LEVEL	1 F-3	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-71B
36-135 REACTOR VESSEL INSTRUMENTATION	1 F-3	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-71D
36-140 REACTOR VESSEL INSTRUMENTATION	1 F-3	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-71E

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18015-C
System : MAIN STEAM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
36-145 REACTOR VESSEL INSTRUMENTATION	1 F-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-71F
36-160 REACTOR VESSEL INSTRUMENTATION	2 C-3	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-72D
36-165 REACTOR VESSEL INSTRUMENTATION	2 C-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-72E
36-170 REACTOR VESSEL LEVEL	2 C-3	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-72F
36-175 REACTOR VESSEL INSTRUMENTATION	2 C-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-133

Drawing No. : C-18015-C
System : MAIN STEAM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
36-48 REACTOR VESSEL LEVEL	NA C-2	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-72A
36-53 REACTOR VESSEL LEVEL	NA C-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-72B

NOTES FOR MAIN STEAM VALVE TABLE

1. IST requirements satisfy SER 26-88.

2. MSIV's 01-03 and 01-04 are fail safe tested by removing electrical power to the solenoids. Loss of air fail safe testing is not required (Ref. IEN 85-84) since the instrument air supply to these valves is safety-related.

3. The setpoint test for the ADS valves consists of a two-part process. During the first part, the pressure switch which actuates these valves is subjected to setpoint pressure using a deadweight tester. This verifies that the relay logic picks up at the required setpoint. The second part consists of manually operating each ADS valve at low power during plant startup following refueling outages. The valves are subjected to reactor steam and verifies that the valve disk opens and steam blowdown to the torus occurs.

4. During the refurbishment of 50% of the ADS valves, if any condition affecting the valve operability is identified, then the remaining 50% of the ADS valves shall be refurbished prior to the plant restart. In addition, ADS valve change of disk position shall be verified by use of accoustic monitors in the discharge lines when these valves are exercised with steam (per NRC SER dated September 22, 1992, TAC Nos. M81833 & M83539).

COLD SHUTDOWN TEST JUSTIFICATION

MS-CS-1

System	:	Main Steam
Valves	:	01-01, 01-02, 01-03, 01-04
Category	:	A
Class	:	1
Function	:	Main Steam Line Isolation Valves
ASME Section XI Quarterly Test Requirements	:	Exercise, time, and fail safe test (01-03, 01-04); Exercise and time (01-01: 01-02)
Cold Shutdown Test Justification	:	Full stroke exercising results in loss of steam flow from one main steam line to the turbine causing a reactor trip. Also, recent industry information indicates that closing these valves with high steam flow in the line may be a large contributing factor in observed seat degradation. The valves are designed for partial stroke exercising with full steam flow during plant operation. The partial stroke test will verify operability of the valve and operator without the potential for seat damage which could result from full stroke exercising.
Quarterly Part Stroke Testing	:	Partial stroke close exercise
Cold Shutdown Testing	:	Full stroke exercise, time, and fail safe test (01-03, 01-04); Full stroke exercise and time (01-01, 01-02)

COLD SHUTDOWN TEST JUSTIFICATION

MS-CS-2

System	:	Main Steam
Valves	:	37-01 (RHV-BV-1); 37-02 (RHV-BV-3); 37-06 (RHV-V-2)
Category	:	B
Class	:	1
Function	:	Reactor Head Vent
ASME Section XI Quarterly Test Requirements	:	Exercise and time
Cold Shutdown Test Justification	:	The design function of these valves is to provide a vent path to primary containment for use during reactor vessel water level changes. This vent path is only utilized during startup, cold shutdowns and for long-term post-LOCA reactor vessel flooding. There is no design basis which would require these valves to be cycled during reactor power operation. In addition, cycling these valves during full power operation would significantly reduce the margin of safety of the Reactor Coolant Pressure Boundary since these valves provide a Reactor Coolant/Primary Containment boundary. Failure of the adjacent valve during cycling would introduce a LOCA within the drywell which would affect operation of equipment necessary for safe shutdown.
Quarterly Part Stroke Testing	:	The above justification also applies for partial exercising.
Cold Shutdown Testing	:	Full stroke exercise and time.

RELIEF REQUEST

MS-RR-1

System	:	Main Steam
Valves	:	NR108A, B, C, D, E, & F
Category	:	B,C
Class	:	1
Function	:	ADS Valves
ASME Section XI Quarterly Test Requirements	:	Exercise IWV-3412 and time IWV-3413 quarterly IWV-3411; Valve Position Indicator Verification IWV-3300
Basis for Relief	:	Opening the ADS valves during power operation causes a discharge of steam into the torus. If the valves failed to reclose after testing, the plant would be placed in a loss-of-coolant transient condition. In addition, a recent study (BWR Owners Group Evaluation of NUREG-0737, Item II.K.3.16, Reduction of Challenges and Failures of Relief Valves) recommends that the number of ADS valve openings be reduced as much as possible. Based on this study and the potential for causing a loss-of-coolant transient condition, exercise testing of the ADS valves will be performed on a refuel cycle. Concerning valve stroke timing during exercising, the position indication in the Control Room only indicates ADS Relief Valve pilot position; there is no direct means for detecting the actual position of the valve disk. Actuation of a relief valve is verified by acoustic monitoring of the ERV line discharge to torus. Measuring the time from the initiation signal for the valve and the acoustic monitoring detection provides no meaningful data for predicting valve degradation.
Alternate Testing	:	In order to assess and ensure the valve's operational readiness, the following test methods and preventative maintenance activities are performed once per refueling outage:

RELIEF REQUEST

MS-RR-1
(Cont'd.)

Alternate Testing :

- Pressure switches that actuate the ADS (electromatic relief valves) are relief set point tested.
- All ADS valves are exercised with steam above 900 lbs. operating pressure.
- All ADS pilot valves are refurbished.
- 50% of the ADS valves are refurbished.
- Remote position indication verifications are performed on all ADS pilot valves.

RELIEF REQUEST

MS-RR-2

System	:	Main Steam
Valves	:	66-07, 66-08, 66-09, 66-10, 66-11, 66-12, 66-13, 66-14, 66-15, 66-16, 66-17, 66-18, 66-25, 66-26, 66-27, 66-28, 66-29, 66-30, 66-31, 66-32, 66-33, 66-34, 66-35, 66-36
Category	:	C
Class	:	2
Function	:	Vacuum Relief Check Valves on the lines from the ADS Valves to the Torus
ASME Section XI Quarterly Test Requirements	:	Exercise, observe force or torque limitations of IWV-3522(b) quarterly IWV-3521
Basis for Relief	:	The valves are vacuum breaker check valves located inside the drywell. The system and valves provide no means for remotely observing operability of the valves. Operability testing requires entry into the drywell which is not possible during normal operation or cold shutdown because of radiation levels and drywell atmosphere being inert. Also, the valves have no provision for installation of a torque wrench for the purpose of measuring the torque or force needed to operate valve.
Alternate Testing	:	Exercising of these valves will be verified by hand exercising during refueling. The attributes utilized during this method are as follows: 1) fully exercise open by hand; 2) inspect for foreign material; 3) inspect for damaged seat and disc; 4) gravity or spring return close.

Drawing No. : C-18020-C
System : REACTOR RECIRC

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
110-127 SAMPLE IV	1 G-1	A	1.00 GLV	MOA	C	C	-	FE-Q ST-Q(C) LJ-R PI-R		FE-Q ST-Q(C) LJ-R PI-R	
110-128 SAMPLE IV	1 G-1	A	1.00 GLV	MOA	C	C	-	FE-Q ST-Q(C) LJ-R PI-R		FE-Q ST-Q(C) LJ-R PI-R	
32-100 RECIRC PUMP "D" SEAL WTR PRESS	1 B-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-38
32-106 RECIRC PUMP "D" SEAL WTR PRESS	1 B-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-38
32-112 RECIRC PUMP "E" SEAL WTR PRESS	1 B-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-47

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18020-C
System : REACTOR RECIRC

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
32-118 RECIRC PUMP "E" SEAL WTR PRESS	1 B-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-47
32-125 RECIRC PUMP "A" FLOW	1 C-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-43
32-131 RECIRC PUMP "A" FLOW	1 C-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-43
32-138 RECIRC PUMP "B" FLOW	1 C-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-37
32-144 RECIRC PUMP "B" FLOW	1 C-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-37

Drawing No. : C-18020-C
System : REACTOR RECIRC

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
32-151 RECIRC PUMP "C" FLOW	1 C-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-36
32-157 RECIRC PUMP "C" FLOW	1 C-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-36
32-164 RECIRC PUMP "D" FLOW	1 C-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-35
32-170 RECIRC PUMP "D" FLOW	1 C-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-35
32-177 RECIRC PUMP "E" FLOW	1 C-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-34

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18020-C
System : REACTOR RECIRC

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
32-183 RECIRC PUMP "E" FLOW	1 C-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-34
32-204 RECIRC PUMP "A" DIFF PRESS	1 D/E-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-29
32-210 RECIRC PUMP "A" DIFF PRESS	1 D/E-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-29
32-215 RECIRC PUMP "B" DIFF PRESS	1 D/E-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-30
32-221 RECIRC PUMP "B" DIFF PRESS	1 D/E-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-30

Drawing No. : C-18020-C
System : REACTOR RECIRC

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
32-226 RECIRC PUMP "C" DIFF PRESS	1 D/E-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-31
32-232 RECIRC PUMP "C" DIFF PRESS	1 D/E-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-31
32-237 RECIRC PUMP "D" DIFF PRESS	1 D/E-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-32
32-243 RECIRC PUMP "D" DIFF PRESS	1 D/E-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-32
32-248 RECIRC PUMP "E" DIFF PRESS	1 D/E-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-28

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18020-C
System : REACTOR RECIRC

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
32-254 RECIRC PUMP "E" DIFF PRESS	1 D/E-6	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-28
32-64 RECIRC PUMP "A" SEAL WTR PRESS	1 B-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-41
32-70 RECIRC PUMP "A" SEAL WTR PRESS	1 B-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-41
32-76 RECIRC PUMP "B" SEAL WTR PRESS	1 B-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-44
32-82 RECIRC PUMP "B" SEAL WTR PRESS	1 B-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-44

Drawing No. : C-18020-C
System : REACTOR RECIRC

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
32-88 RECIRC PUMP "C" SEAL WTR PRESS	1 B-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-42
32-94 RECIRC PUMP "C" SEAL WTR PRESS	1 B-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-42
44.1-07 TOTAL RECIRC FLOW	1 F-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R LJ-R	PEN. ID; X-82(K1)
44.1-12 TOTAL RECIRC FLOW	1 F-4	A,C	.75 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-82(K2)

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18016-C,SH.1
System : CONTROL ROD DRIVE

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
106 CHARGING WATER ISOLATION VALVE	2 C-3	C	0.5 SCV	SEA/ MAA	DE	C	-	FE-Q(R)	RR-2	FE-R(R)	NOTE 1
108 SCRAM DISCHARGE ISOLATION VALVE	2 A-3	C	0.75 SCV	SEA/ MAA	DE	O	-	FE-Q(F)	RR-1	RR-1	NOTES 1,2
126 SCRAM INLET VALVE	2 C-2	B	0.75 GLV	ADA	C	O	O	FE-Q ST-Q(O) FS-Q(O) PI-R	RR-1	RR-1	NOTES 1,3
127 SCRAM DISCHARGE	2 A-2	B	0.75 GLV	ADA	C	O	O	FE-Q ST-Q(O) FS-Q(O) PI-R	RR-1	RR-1	NOTES 1,3
138 COOLING WATER INLET CHECK	2 C-2	C	0.5 CHV	SEA	DE	C	-	FE-Q(R)	RR-1	RR-1	NOTES 1,4

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18016-C,SH.1
System : CONTROL ROD DRIVE

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
44.3-12 (301-112) CONTAINMENT ISOLA.	1 H-5	A,C	3.00 CHV	SEA	DE	C	-	FE-Q(R) LA-R	RR-3	FE-R(R) LA-R	
44.3-13 (301-113) CONTAINMENT ISOLA.	1 H-5	A,C	3.00 CHV	SEA	DE	C	-	FE-Q(R) LA-R	RR-3	FE-R(R) LA-R	

Drawing No. : C-18016-C,SH.2
System : CONTROL ROD DRIVE

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
44.2-15 SCRAM DISCHARGE VOL. VENT IV	2 A-3	A	2.00 GLV	ADA	O	C	C	FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R	RR-4	FE-Q,LJ-R FS-Q(C) PI-R,FE-R ST-R(C) FS-R(C)	
44.2-16 SCRAM DISCHARGE VOL. VENT IV	2 A-5	A	2.00 GLV	ADA	O	C	C	FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R	NOTE 5
44.2-17 SCRAM DISCHARGE VOL. DRAIN IV	2 E-5	A	2.00 GLV	ADA	O	C	C	FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R	NOTE 5
44.2-18 SCRAM DISCHARGE VOL. DRAIN IV	2 F-5	A	2.00 GLV	ADA	O	C	C	FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R	RR-4	FE-Q,LJ-R ST-Q(C) PI-R,FE-R ST-R(C) FS-R(C)	

NOTES FOR CRD VALVE TABLE

1. Typical of 129 Control Rod Drive Hydraulic Units.

2. Proper operation of the Control Rod during Rod Insertion Time testing verifies forward flow opening.

3. Proper operation of the Control Rod during Rod Insertion time testing verifies valve opening and adequate valve stroke time.

4. Normal control rod motion verifies that these check valves move to their closed position. Each partially or fully withdrawn control rod is exercised at least once per week per plant Technical Specifications while at operating conditions. When fully inserted control rods are withdrawn to a new value, this also has the same effect. Rod motion may not occur if these check valves were to fail in the open position. Also, during refueling, Technical Specification control rod scram insertion time testing verifies proper operation of each of these valves.

   Frequency of testing for check valve 138 is solely dependent on the status of the control rod (e.g. quarterly testing for 138 is maintained when the control rod is fully or partially withdrawn, or suspended when the control rod is fully inserted).

5. Quarterly testing of this valve is performed through the test solenoid (Test Path). During refueling outage intervals, testing of this valve shall be performed through the scram exhaust path (Scram Path).

RELIEF REQUEST
CRD-RR-1

System	:	Control Rod Drive
Valves	:	108, 126, 127, 138 (To be done for all 129 HCU's)
Category	:	B (126, 127) C (108, 138)
Class	:	2
Function	:	Reactor Shutdown
ASME Section XI Quarterly Test Requirements	:	Exercise IWV-3412; time IWV-3413; and fail safe test IWV-3415 quarterly IWV-3411 position indication IWV-3300 (126, 127); verify forward flow opening IWV-3522 quarterly IWV-3521 (108); verify reverse flow closure IWV-3522 quarterly IWV-3521 (138)
Basis for Relief	:	The Hydraulic Control units (HCU) are integrally designed systems (GE) for controlling rod drive movements. Individual valve testing is not possible without causing a control rod scram with a resulting change in core reactivity. Scram testing rods at power also introduces degrading wear and tear on control rod drive mechanisms and to the lower region of the reactor vessel due to both thermal and hydraulic shock. In addition, there is high probability that control rod scram testing results in accelerated deterioration of the CRD stub tube area (cracking) due to this thermal and hydraulic shock, a problem identified at NMP1 during the 1984 refueling outage and for which a major engineering effort is underway in search of a long term permanent repair. Therefore, Niagara Mohawk believes that performing scram time testing during power operation for the sole purpose of verifying proper scram inlet and outlet valve (126, 127)

stoke times is very undesirable and unwarranted based on these considerations. The Technical Specification Control Rod Scram Insertion Time testing meets the intent of Section XI testing requirements. For fully or partially withdrawn control rods, the ability to achieve normal control rod exercising verifies the cooling water check valve, (138), has moved to its safety function position. All fully or partially withdrawn control rods are exercised weekly per plant Technical Specifications. Control rods that are fully inserted are determined to be in their safety function and are not required to be tested on a quarterly basis.

Alternate Testing : Technical Specification Control Rod Scram Insertion Time testing serves to verify proper operation of each of these valves. Following each reactor scram from rated pressure, the mean 90% insertion time shall be determined for eight selected rods. If the mean 90% insertion time of the selected control rod drives does not fall within the range of 2.4 to 3.1 seconds or the measured scram time of any one drive for 90% insertion does not fall within the range of 1.9 to 3.6 seconds, an evaluation shall be made to provide reasonable assurance that proper control rod drive performance is maintained. After each major refueling outage and prior to power operation with reactor pressure above 800 psig, all operable control rods shall be scram tested from the fully withdrawn position. Following any outage not initiated by a reactor scram, eight rods shall be scram tested with reactor pressure above 800 psig.

Cooling water check valve (138) exercising frequency is dependent upon whether it is withdrawn (either partially or fully). Quarterly exercising credit due to weekly rod movement tests that are required by Technical Specifications will be maintained until the associated control rod is fully inserted. Control rods that are fully inserted will not be tested on a quarterly basis.

This is in accordance with Generic Letter 89-04, Attachment 1, Item 7.

RELIEF REQUEST

CRD-RR-2

System	:	Control Rod Drive
Valves	:	106 (to be done for all 129 HCU's)
Category	:	C
Class	:	2
Function	:	Reactor Shutdown
ASME Section XI Quarterly Test Requirements	:	Verify reverse flow closure IWV-3522 quarterly IWV-3521
Basis for Relief	:	The Hydraulic Control units (HCU) are integrally designed systems (GE) for controlling rod drive movements. The HCU charging water lines cannot be individually isolated due to the piping configuration (lack of individual block valves and test connections). Quarterly testing is impractical to perform since the Control Rod Drive System is in continuous operation. Cold Shutdown testing of these valves is undesirable since testing these valves requires depressurizing and venting the entire charging water header which results in gas intrusion. Also, during periods of reactor shutdown, and any time that fuel remains in the core, the control rod drive system must remain in a standby readiness condition. Therefore, both quarterly and cold shutdown testing of these valves is impractical.
Alternate Testing	:	A scram accumulator pressure decay test shall be performed during refueling outages which verify the reverse flow closure of the charging water check valves.

RELIEF REQUEST

CRD-RR-3

System	:	Control Rod Drive
Valve	:	44.3-12, (301-112), 44.3-13 (301-113)
Category	:	A,C
Class	:	1
Function	:	Containment Isolation
ASME Section XI Quarterly Test Requirements	:	Verify reverse flow closure IWV-3522 quarterly IWV-3521
Basis for Relief	:	During all modes of operation, the CRD pumps are normally inservice which discharges to the reactor vessel through these valves at a pressure above reactor pressure. Reverse flow closure for these valves has to be performed from inside containment (access to test corrections) which is not available quarterly and not always during cold shutdowns (inerted atmosphere, temperature levels/ALARA concerns, etc.).
Alternate Testing	:	These valves will have reverse flow closure verified during ASME XI Leakage Testing at refueling.

RELIEF REQUEST

CRD-RR-4

System	:	Control Rod Drive
Valves	:	44.2-15, 44.2-18
Category	:	A
Class	:	2
Function	:	Scram Discharge Volume Vent and Drain Isolation Valves
ASME Section XI Quarterly Test Requirements	:	Stroke time IWV-3413 quarterly IWV-3411
Basis for Relief	:	Solenoid air pilot valves control the air supply to the air actuators for valves 44.2-15 and 44.2-18. The solenoid valves utilize two different exhaust paths: one reverse venting path for testing purposes (valve exercising) and one path for normal valve operation (reactor scram conditions). These solenoids have internal pilots and are not designed for universal operation. That is, they are not designed to accept dual inlet and exhaust flows. When reverse venting occurs during testing, the air flow is restricted. Consequently, the stroke times obtained during valve (test mode) operation are much longer than those for valve (safety mode) operation (approximately 140 seconds versus approximately 5 seconds). The test mode operation is not repeatable, nor does it represent the entire safety exhaust path of the valve. Also, due to the design of the electrical circuitry, it is not possible to de-energize the solenoid valves and vent via the normal path

without causing a reactor scram. This makes quarterly testing impractical. Testing is impractical to perform during cold shutdowns as venting the scram air pilot header to stroke the valves scrams the control rods. This subjects the system to high differential pressure which, as discussed in CRD-RR-1, has resulted in equipment damage.

Alternate Testing : Exercise and fail-safe test at quarterly intervals through the test path. Exercise, time, and fail-safe test through the scram path during refueling outage intervals.

Drawing No. : C-18005-C,SH.2
System : FEEDWATER

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
31-01R #11 FW RISER ISOL. CHECK VALVE	1 B-3	A,C	18.00 CHV	SEA	DE	C	-	FE-Q(R) LJ-R	CS-2	FE-C(R) LJ-R	
31-02R #12 FW RISER ISOL. CHECK VALVE	1 B-3	A,C	18.00 CHV	SEA	DE	C	-	FE-Q(R) LJ-R	CS-2	FE-C(R) LJ-R	
31-07 #11 FW ISOL. VALVE	1 B-3	A	18.00 GTV	MOA	O	C	-	FE-Q ST-Q(C) LJ-R PI-R	CS-1	PE-Q ST-C(C) FE-C PI-R FE-R,LJ-R	
31-08 #12 FW ISOL. VALVE	1 B-3	A	18.00 GTV	MOA	O	C	-	FE-Q ST-Q(C) LJ-R PI-R	CS-1	PE-Q ST-C(C) FE-C PI-R FE-R,LJ-R	

COLD SHUTDOWN TEST JUSTIFICATION

FW-CS-1

System	:	FEEDWATER
Valves	:	31-07, 31-08
Category	:	A
Class	:	1
Function	:	Feedwater Isolation Valves
ASME Section XI Quarterly Test Requirements	:	Exercise and time
Cold Shutdown Test Justification	:	Exercising these valves closed during normal operation would require a significant reduction in power, isolating one loop of feedwater flow (reduction in normal feedwater supply to the vessel), introducing undesirable operational transients which could result in a reactor trip and introduce degrading feedwater nozzle temperature transients which could cause cracking (Ref. NUREG 0619).
Quarterly Part Stroke Testing	:	Partial stroke close exercise
Cold Shutdown Testing	:	Full stroke exercise and time

COLD SHUTDOWN TEST JUSTIFICATION

FW-CS-2

System	:	Feedwater
Valves	:	31-01R, 31-02R
Category	:	A,C
Class	:	1
Function	:	Feedwater Isolation Check Valves
ASME Section XI Quarterly Test Requirements	:	Verify reverse flow closure
Cold Shutdown Test Justification	:	Exercising these valves closed during normal operation would require a significant reduction in power, isolating one loop of feedwater flow (reduction in normal feedwater supply to the vessel), introducing undesirable operational transients which could result in a reactor trip, and introducing degrading feedwater nozzle temperature transients which could cause cracking (Ref. NUREG 0619).
Cold Shutdown Testing	:	Reverse flow testing will be performed during cold shutdowns by pressurizing across the valve with water. Reverse flow testing during refueling outages will be verified through Appendix J, type C testing.

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18007-C
System : CORE SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
40-01 CORE SPRAY #12B INLET TO REACTOR	1 E-3	A	12.00 GTV	MOA	C	OC	-	FE-Q ST-Q(O,C) PI-R LA-R		FE-Q ST-Q(O,C) PI-R LA-R	
40-02 CRS#12 INLET OUTSIDE IV	1 F-3	B	12.00 GTV	MOA	O	O	-	FE-Q ST-Q(O) PI-R		FE-Q ST-Q(O) PI-R	
40-03 CRS#12 INLET OUTSIDE CHECK VALVE	1 C-3	A,C	12.00 CHV	SEA	DE	OC	-	FE-Q(F,R) LK-C	RR-1	PE-Q(F) FE-Q(R) FE-R(F) LK-C	NOTE 1
40-05 TEST IV#12 TO TORUS	1 G-3	A	6.00 GTV	MOA	C	C	-	FE-Q ST-Q(C) PI-R LA-R		FE-Q ST-Q(C) PI-R LA-R	
40-06 TEST IV#11 TO TORUS	1 B-3	A	6.00 GTV	MOA	C	C	-	FE-Q ST-Q(C) PI-R LA-R		FE-Q ST-Q(C) PI-R LA-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18007-C
System : CORE SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
40-09 CORE SPRAY #12A INLET TO REACTOR	1 E-3	A	12.00 GTV	MOA	C	OC	-	FE-Q ST-Q(O,C) PI-R LA-R		FE-Q ST-O(O,C) PI-R LA-R	
40-10 CORE SPRAY #11A INLET TO REACTOR	1 D-3	A	12.00 GTV	MOA	C	OC	-	FE-Q ST-Q(O,C) PI-R LA-R		FE-Q ST-Q(O,C) PI-R LA-R	
40-11 CORE SPRAY #11B INLET TO REACTOR	1 D-3	A	12.00 GTV	MOA	C	OC	-	FE-Q ST-Q(O,C) PI-R LA-R		FE-Q ST-Q(O,C) PI-R LA-R	
40-12 CRS#11 INLET OUTSIDE IV	1 C-3	B	12.00 GTV	MOA	O	O	-	FE-Q ST-Q(O) PI-R		FE-Q ST-Q(O) PI-R	
40-13 CRS#11 INLET OUTSIDE CHECK VALVE	1 B-3	A,C	12.00 CHV	SEA	DE	OC	-	FE-Q(F,R) LK-C	RR-1	PE-Q(F) FE-Q(R) FE-R(F) LK-C	NOTE 1

Drawing No. : C-18007-C
System : CORE SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
40-20 1ST CHECK #11 KEEP-FILL	2 B-2	A,C	2.00 CHV	SEA	DE	C	-	FE-Q(R) LK-C	RR-4	FE-C(R) LK-C	NOTE 1
40-21 2ND CHECK #11 KEEP-FILL	1 B-2	A,C	2.00 CHV	SEA	DE	C	-	FE-Q(R) LK-C		FE-Q(R) LK-C	NOTE 1
40-22 2ND CHECK #12 KEEP-FILL	1 G-2	A,C	2.00 CHV	SEA	DE	C	-	FE-Q(R) LK-C		FE-Q(R) LK-C	NOTE 1
40-23 1ST CHECK #12 KEEP-FILL	2 G-2	A,C	2.00 CHV	SEA	DE	C	-	FE-Q(R) LK-C	RR-4	FE-C(R) LK-C	NOTE 1
40-30 CORE SPRAY #11 HIGH POINT VENT IV	1 D-2	A	1.00 GLV	MOA	C	C	-	FE-Q ST-Q(C) PI-R LA-R		FE-Q ST-Q(C) PI-R LA-R	

Drawing No. : C-18007-C
System : CORE SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
40-31 CORE SPRAY #12 HIGH POINT VENT IV	1 E-2	A	1.00 GLV	MOA	C	C	-	FE-Q ST-Q(C) PI-R LA-R		FE-Q ST-Q(C) PI-R LA-R	
40-32 CORE SPRAY #11 HIGH POINT VENT IV	2 C-2	A	1.00 GLV	ADA	C	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R LA-R		FE-Q ST-Q(C) FS-Q(C) PI-R LA-R	
40-33 CORE SPRAY #12 HIGH POINT VENT IV	2 F-2	A	1.00 GLV	ADA	C	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R LA-R		FE-Q ST-Q(C) FS-Q(C) PI-R LA-R	
58-07 TORUS WTR LEVEL EXCESS FLOW CHECK VALVE	2	AC	1.50 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F)	NOTE 3; PEN. ID; XS-348
81-01 CORE SPRAY PUMP SUCTION VALVE	2 F-4	A	14.00 GTV	MOA	O	OC	-	FE-Q ST-Q(O,C) PI-R LA-R		FE-Q ST-Q(O,C) PI-R LA-R	

Drawing No. : C-18007-C
System : CORE SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
81-02 CORE SPRAY PUMP SUCTION VALVE	2 E-4	A	14.00 GTV	MOA	O	OC	-	FE-Q ST-Q(O,C) PI-R LA-R		FE-Q ST-Q(O,C) PI-R LA-R	
81-07 TOPPING PUMP 121 DISCHARGE CHK VALVE	2 H-4	C	12.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-1	PE-Q(F) FE-Q(R) FE-R(F)	
81-08 TOPPING PUMP 122 DISCHARGE CHK VALVE	2 H-4	C	12.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-1	PE-Q(F) FE-Q(R) FE-R(F)	
81-11 LOOP #12 DISCHARGE PSV	2 H-3	C	2.00 REV	SEA	DE	O	-	RT-P		RT-P	NOTE 2
81-169 (CS-C-3,#12) C.S. TOPPING PUMPS 121 & 122 PSV CHECK VALVE	2 G-3	C	0.75 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	DI-RS(F,R)	

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VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
81-170 (CS-C-3,#11) C.S. TOPPING PUMPS 111 & 112 PSV CHECK VALVE	2 B-5	C	0.75 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-2	DI-RS(F,R)	
81-21 CORE SPRAY PUMP SUCTION VALVE	2 C-4	A	14.00 GTV	MOA	O	OC	-	FE-Q ST-Q(O,C) PI-R LA-R		FE-Q ST-Q(O,C) PI-R LA-R	
81-22 CORE SPRAY PUMP SUCTION VALVE	2 C-4	A	14.00 GTV	MOA	O	OC	-	FE-Q ST-Q(O,C) PI-R LA-R		FE-Q ST-Q(O,C) PI-R LA-R	
81-27 TOPPING PUMP 111 DISCHARGE CHK VALVE	2 A-4	C	12.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-1	PE-Q(F) FE-Q(R) FE-R(F)	
81-28 TOPPING PUMP 112 DISCHARGE CHK VALVE	2 A-4	C	12.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-1	PE-Q(F) FE-Q(R) FE-R(F)	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18007-C
System : CORE SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
81-31 LOOP #11 DISCHARGE PSV	2 A-3	C	2.00 REV	SEA	DE	O	-	RT-P		RT-P	NOTE 2
81-73 CORE SPRAY PUMP 111 MOTOR COOLER RELIEF VALVE	2 B-4	C	0.75 REV	SEA	C	O	-	RT-P		RT-P	
81-74 CORE SPRAY PUMP 112 MOTOR COOLER RELIEF VALVE	2 B-5	C	0.75 REV	SEA	C	O	-	RT-P		RT-P	
81-75 CORE SPRAY PUMP 121 MOTOR COOLER RELIEF VALVE	2 G-4	C	0.75 REV	SEA	C	O	-	RT-P		RT-P	
81-76 CORE SPRAY PUMP 122 MOTOR COOLER RELIEF VALVE	2 G-5	C	0.75 REV	SEA	C	O	-	RT-P		RT-P	

Drawing No. : C-18007-C
System : CORE SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
81-77 TOPPING PUMP PRV	2 H-2	C	0.75 REV	SEA	DE	O	-	RT-P		RT-P	
81-78 TOPPING PUMP PRV	2 H-2	C	0.75 REV	SEA	DE	O	-	RT-P		RT-P	
81-79 TOPPING PUMP PRV	2 H-2	C	0.75 REV	SEA	DE	O	-	RT-P		RT-P	
81-80 TOPPING PUMP PRV	2 H-2	C	0.75 REV	SEA	DE	O	-	RT-P		RT-P	

NOTES FOR CORE SPRAY VALVE TABLE

1. Reference Technical Specification 4.2.7.1 for pressure isolation valve testing during refuel outages and cold shutdowns.

2. IST requirements satisfy INPO SER 26-88.

3. Valve not shown on P&ID.

RELIEF REQUEST

CS-RR-1

System	:	Core Spray
Valve	:	40-03, 40-13, 81-07, 81-08, 81-27, 81-28
Category	:	A,C (40-03, 40-13) C (81-07, 81-08, 81-27, 81-28)
Class	:	1 (40-03, 40-13) 2 (81-07, 81-08, 81-27, 81-28)
Function	:	Core Spray Inlet Check Valve (40-03, 40-13); Core Spray Topping Pump Discharge Check Valves (81-07, 81-08, 81-27, 81-28)
ASME Section XI Quarterly Test Requirements	:	Verify forward flow opening IWV-3522
Basis for Relief	:	These valves are tested quarterly during the surveillance tests of the core spray system pumps. The valves have no provision for determining disk position. The required system flow rate is 4152 gpm. In order to minimize system vibration, the test flow rate is limited to approximately 2900 gpm by the size of the test line. From manufacturer's published information, valves 40-03 and 40-13 should be fully open at a flow rate of about 1600 gpm. Valves 81-07, 81-08, 81-27, and 81-28 should be fully open at a flow rate of about 2200 gpm. In addition, pressure readings are recorded during the test and compared to acceptance limits of subsection IWP. Full flow testing during cold shutdowns is impractical due to the need for temporary piping alterations.

Basis for Relief : Valves 81-07 and 81-27 cannot be supplied with condensate water to permit full flow testing through the main core spray injection piping. This was the basis for proposing disassembly and inspection on a rotational basis beginning with the 1993 Refueling Outage after modifications were performed to allow disassembly and inspection. As recommended in the Commission's SER dated March 7, 1991, non-intrusive testing has been considered for these valves. Based on the manufacturer's estimation that the valves should be full open at 2200 gpm and that the test flow rate during quarterly testing is approximately 2900 gpm, non-intrusive testing is an acceptable alternative to disassembly and inspection. Non-intrusive testing is actually more desirable since it would avoid the need to perform modifications starting in the 1993 Refueling Outage. In addition, as evidenced in the NRC's Safety Evaluation dated March 7, 1991, the NRC does not endorse disassembly and inspection unless it can be demonstrated that no other alternative exists.

The frequency of performing non-intrusive testing is recommended to be once per refueling outage (every two years) for each valve. The justification for this is as follows:

- It is expected that considerable equipment setup time will be required (temporary modification to install transducers) as well as extending the duration of the test to acquire the necessary data.

RELIEF REQUEST CS-RR-1 (Cont'd.)

Basis for Relief :

- Non-intrusive testing is expected to provide additional information about a check valve's overall condition above that obtained through normal full forward flow testing. This will provide an added measure of the operational readiness of these valves.

- Quarterly partial stroke testing is performed at substantial flow (2900 gpm) and is expected to exercise the valve disk to the full open position based on manufacturer's information. This testing, when combined with the quarterly reverse flow test and non-intrusive test every refueling outage (two years), should provide reasonable assurance that the valves are operating properly.

Alternate Testing :

A. As described above, all valves are partially exercised quarterly with 2900 gpm flow.

B. Full flow testing to the reactor vessel for check valves 40-03, 40-13, 81-08 and 81-28 is performed once per refueling outage (two years).

C. Non-intrusive testing once per refueling (two years) for check valves 81-07 and 81-27 will be performed starting in the 1993 Refueling Outage.

RELIEF REQUEST

CS-RR-2

System	:	Core Spray
Valve	:	81-169 (Loop #121 & #122); 81-170 (Loop #111 & #112)
Category	:	C
Class	:	2
Function	:	Core Spray Topping Pumps Header Drain Line Valves
ASME Section XI Quarterly Test Requirements	:	Verify forward flow opening and reverse flow closure IWV-3522 quarterly IWV-3521
Basis for Relief	:	The only method available to verify opening and closure of these valves is by disassembly and inspection.
Alternate Testing	:	Full flow exercising shall be verified individually for each valve by disassembly and inspection on an alternate basis during each refueling outage. Disassembly and inspection shall be performed in accordance with NRC staff position stipulated in GL-89-04, Position 2.

RELIEF REQUEST

CS-RR-4

System	:	Core Spray
Valves	:	40-20, 40-23
Category	:	A,C
Class	:	1
Function	:	Containment and Pressure Isolation Check Valves (reverse flow closure for containment and pressure isolation only).
ASME Section XI Quarterly Test Requirements	:	Verify reverse flow closure IWV-3522 quarterly IWV-3521.
Basis for Relief	:	Valves 40-20 and 40-23 are the outboard check valves in each of two series check valve sets (one set for each loop). The inboard check valves are tested during the ASME Section XI pump tests. The outboard check valves cannot be tested without jumpering the inboard check valve or providing a separate hydro pump to provide a pressure source. This is deemed to be impractical since all of the check valves are leakage tested during cold shutdowns of at least 72 hours unless testing has been performed within the last 9 months (Ref. Technical Specification 4.2.7.1).
Alternate Testing	:	Reverse flow closure will be performed during the pressure isolation valve leakage testing performed during Cold Shutdown Testing, as required by the NMP1 Technical Specification 4.2.7.1.

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18017-C
System : EMERG. COOLING

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
05-01R EMERG. COND. LOOP #11 VENT B.V.	2 D-2	B	1.00 GLV	APA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	
05-02R EMERG. COND. VENT IV 11 TO MAIN STEAM LINE	2 D-1	B	1.00 GLV	APA	O	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	
05-03R EMERG. COND. VENT IV 12 TO MAIN STEAM LINE	2 D-1	B	1.00 GLV	APA	O	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	
05-04R EMERG. COND. LOOP #12 VENT B.V.	2 E-2	B	1.00 GLV	APA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	
05-05 EMERG. COND. VENT TO TORUS B.V. #11	2 E-2	B	1.5 GLV	MOA	C	OC	-	FE-Q ST-Q(O,C) PI-R		FE-Q ST-Q(O,C) PI-R	

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VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
05-07 EMERG. COND. VENT TO TORUS B.V. #12	2 E-3	B	1.5 GLV	MOA	C	OC	-	FE-Q ST-Q(O,C) PI-R		FE-Q ST-Q(O,C) PI-R	
05-11 EMERG. COND. LOOP #11 VENT B.V.	2 D-2	B	1.00 GLV	APA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	
05-12 EMERG. COND. LOOP #12 VENT B.V.	2 E-2	B	1.00 GLV	APA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	
36-57 EMERG. COND. LOOP 11 STM. FLOW	1 D-4	A,C	1.00 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-71C
36-62 EMERG. COND. LOOP 11 STM. FLOW	1 D-5	A,C	1.00 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-51

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REPORT DATE: 10/12/92

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36-67 EMERG. COND. LOOP 12 STM. FLOW	1 E-4	A,C	1.00 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-54
36-72 EMERG. COND. LOOP 12 STM. FLOW	1 E-5	A,C	1.00 EFV	SEA	O	C	-	FE-Q(F) LJ-R	VG-3	FE-R(F) LJ-R	PEN. ID; X-72C
39-03 LOOP #11 COND. RETURN INLET CHECK	1 D-6	A,C	10.00 CHV	SEA	DE	OC	-	FE-Q(F,R) LJ-R	RR-1	FE-R(R) FE-RS(F) DI-RS(F) LJ-R	NOTE 2
39-04 LOOP #12 COND. RETURN INLET CHECK	1 E-6	A,C	10.00 CHV	SEA	DE	OC	-	FE-Q(F,R) LJ-R	RR-1	FE-R(R) FE-RS(F) DI-RS(F) LJ-R	NOTE 2
39-05 LOOP #11 COND. RETURN I.V.	1 C-6	A	10.00 GLV	APA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O) PI-R LJ-R	CS-1	FE-C ST-C(O,C) FS-C(O) PI-R LJ-R	NOTE 2

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39-06 LOOP #12 COND. RETURN I.V.	1 F-6	A	10.00 GLV	APA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O) PI-R LJ-R	CS-1	FE-C ST-C(O,C) FS-C(O) PI-R LJ-R	NOTE 2
39-07R LOOP #11 STEAM OUTLET OUTSIDE I.V. EMERG. COND. STM. I.V. #112	1 D-4	A	10.00 GTV	MOA	O	OC	_	FE-Q ST-Q(O,C) LJ-R PI-R		FE-Q ST-Q(O,C) LJ-R PI-R	
39-08R LOOP #12 STEAM OUTLET OUTSIDE I.V. EMERG. COND. STM. I.V. #122	1 E-4	A	10.00 GTV	MOA	O	OC	_	FE-Q ST-Q(O,C) LJ-R PI-R		FE-Q ST-Q(O,C) LJ-R PI-R	
39-09R LOOP #11 STEAM OUTLET INSIDE I.V. EMERG. COND. STM. I.V. #111	1 D-4	A	10.00 GTV	MOA	O	OC	_	FE-Q ST-Q(O,C) LJ-R PI-R		FE-Q ST-Q(O,C) LJ-R PI-R	
39-10R LOOP #12 STEAM OUTLET INSIDE I.V. EMERG. COND. STM. I.V. #121	1 D-4	A	10.00 GTV	MOA	O	OC	_	FE-Q ST-Q(O,C) LJ-R PI-R		FE-Q ST-Q(O,C) LJ-R PI-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

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39-11R LOOP #11 STEAM LINE DRAIN 1ST I.V.	2 B-4	B	1.00 GTV	ADA	O	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	
39-12R LOOP #11 STEAM LINE DRAIN 2ND I.V.	2 B-4	B	1.00 GTV	ADA	O	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	
39-13R LOOP #12 STEAM LINE DRAIN 1ST I.V.	2 G-4	B	1.00 GTV	ADA	O	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	
39-14R LOOP #12 STEAM LINE DRAIN 2ND I.V.	2 G-4	B	1.00 GTV	ADA	O	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	
60-03 LINE FROM COND. TRANS. PUMP TO EMER. COND. M.U. TANK #12	3 G-1	B	4.00 GLV	ADA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	

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60-04 LINE FROM COND. TRANS. PUMP TO EMER. COND. M.U. TANK #11	3 B-1	B	4.00 GLV	ADA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	
60-05 CHECK VALVE ON COND. SUPPLY TO EMCU TANK #11	3 B-1	C	4.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
60-06 CHECK VALVE ON COND. SUPPLY TO EMCU TANK #12	3 G-1	C	4.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
60-17 EMERG. COND. 111-112 LEVEL CONTROL VALVE	3 B-2	B	4.00 GLV	ADA	DE	O	O	FE-Q ST-Q(O) FS-Q(O) PI-R		FE-Q ST-Q(O) FS-Q(O) PI-R	NOTE 1
60-18 EMERG. COND. 121-122 LEVEL CONTROL VALVE	3 G-2	B	4.00 GLV	ADA	DE	O	O	FE-Q ST-Q(O) FS-Q(O) PI-R		FE-Q ST-Q(O) FS-Q(O) PI-R	NOTE 1

NOTES FOR EMERGENCY COOLING VALVE TABLE

1. Level control valve to maintain emergency condenser water level.

2. These valves are currently under a schedular exemption from leakage testing (Appendix J, 10CFR50). Appendix J Type C testing will commence during the 1994 refuel outage following the completion of necessary modifications.

COLD SHUTDOWN TEST JUSTIFICATION

EC-CS-1

System	:	Emergency Cooling
Valves	:	39-05, 39-06
Category	:	A
Class	:	1
Function	:	Emergency Cooling System discharge to Reactor Recirculation System air operated blocking valves
ASME Section XI Quarterly Test Requirements	:	Exercise, time and fail safe test
Cold Shutdown Test Justification	:	Manual Block Valves 39-01 and 39-02 cannot be closed since they are inside the drywell which is inaccessible during power operations due to the inerted atmosphere, the increased temperature/radiation levels for test personnel, etc. Operation (opening) of valves 39-05 and 39-06 during power operations would place the system into service, resulting in a slug of cold water being delivered to the reactor primary system. The cold water injection would result in a neutron spike and corresponding increase in the Average Power Range Monitors (APRM). Depending on the initial plant condition, a reactor scram could occur.
Quarterly Part Stroke Testing	:	Partial exercising of these valves could pose the same sequence of events.
Cold Shutdown Testing	:	Valves will be exercised, timed and fail safe tested at cold shutdowns when the reactor temperature is low and the potential problems associated with cold water injection are minimized.

RELIEF REQUEST

EC-RR-1

System	:	Emergency Cooling
Valves	:	39-03, 39-04
Category	:	A,C
Class	:	1
Function	:	Containment Isolation
ASME Section XI Quarterly Test Requirements	:	Verify forward flow opening and reverse flow closure IWV-3522 quarterly IWV-3521
Basis for Relief	:	To verify forward flow operability would require placing the Emergency Cooling System into operation. These valves are normally maintained closed by Reactor Recirculation System operating pressure and to initiate flow through the valves requires initiation of the Emergency Cooling System. The Emergency Cooling System is not initiated unless the plant is being shut down under emergency conditions and initiation during normal operation would result in shutting the plant down. The Emergency Cooling System is only placed in service for testing once every five years. The test frequency, as specified in Tech. Spec. 4.1.3.a, is limited to once every five years in an attempt to limit the fatigue (thermal and hydraulic) on the system which is experienced during these tests. These valves are located in the drywell which is inaccessible during normal operations (inerted atmosphere, radiation exposure concerns, elevated temperature/heat stress for personnel,

etc.). Opening test connections to use as a telltale for reverse flow verification is impractical as it breeches the reactor coolant pressure boundary, violates containment integrity, and is considered a safety hazard to test personnel.

Alternate Testing : Disassembly and inspection of these valves will be performed on a rotating basis except when full flow testing is performed. Disassembly and inspection or full flow testing shall be performed during each refueling outage. This sequence will start at refueling outage no. RF-13 scheduled in 1994/1995 due to the Appendix J, 10CFR50 schedular exemption for valves 39-03 and 39-04.

Disassembly and inspection shall be performed in accordance with NRC staff position stipulated in GL-89-04, Position 2.

Reverse flow closure shall be verified individually for each valve during each refueling outage (either by performing of a leakage rate testing or by other means).

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18018-C,SH.1
System : REAC SHUTDWN COOL

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
38-01 SC OUTLET INSIDE ISOLATION VALVE	1 H-4	A	14.00 GTV	MOA	C	C	-	FE-Q ST-Q(C) PI-R LJ-R LA-R	CS-1	FE-C ST-C(C) PI-R LJ-R LA-R	NOTE 1
38-02 SC OUTLET OUTSIDE ISOLATION VALVE	1 G-4	A	14.00 GTV	MOA	C	C	-	FE-Q ST-Q(C) PI-R LJ-R LA-R	CS-1	FE-C ST-C(C) PI-R LJ-R LA-R	NOTE 1
38-12 SC INLET OUTSIDE ISO. CHECK VALVE	1 A-3	A,C	14.00 CHV	SEA	DE	C	-	FE-Q LJ-R LA-R	CS-1	FE-C(R) LJ-R LA-R	NOTE 1
38-13 SC INLET INSIDE ISOLATION VALVE	1 A-3	A	14.00 GTV	MOA	C	C	-	FE-Q ST-Q(C) PI-R LJ-R LA-R	CS-1	FE-C ST-C(O) PI-R LJ-R LA-R	NOTE 1

NOTES FOR REACTOR SHUTDOWN COOLING VALVE TABLE

1. These valves are presently ASME Section XI leakage valves. They are being reclassified as containment isolation valves. A schedular exemption for leakage rate testing of these valves in accordance with Appendix J, 10CFR50, has been granted through the No. 13 Refuel Outage. At the completion of Refueling Outage No. 13, scheduled for 1994/1995, the test requirement will be changed to LJ only for Appendix J, 10CFR50 testing versus LJ and LA for both Appendix J, 10CFR50 and ASME Section XI valve testing. They will be Type C tested during the 1994/1995 refuel.

COLD SHUTDOWN TEST JUSTIFICATION

RSC-CS-1

System	:	Reactor Shutdown Cooling
Valves	:	38-01, 38-02, 38-13, 38-12
Category	:	A (38-01, 38-02, 38-13) A,C (38-12)
Class	:	1
Function	:	Isolation Valves
ASME Section XI Quarterly Test Requirements	:	Exercise and time (38-01, 38-02, 38-13) Verify reverse flow closure (38-12)
Cold Shutdown Test Justification	:	The Reactor Shutdown Cooling System is designed to cool reactor coolant below temperatures and pressures at which the main condenser may be used as a heat sink. The motor-operated gate valves which normally function (cycle) at a service temperature of approximately 350°F and pressure of less than 120 psig (designed interlocks) were not designed to cycle at the higher differential pressure that would be experienced if cycled at full power. Sequenced with the motor-operated valve (38-13) stroking, the reverse flow closure verification on check valve 38-12 shall be performed.
Quarterly Part Stroke Testing	:	none
Cold Shutdown Testing	:	full stroke exercise and time; verify reverse flow closure

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18012-C,SH.1
System : CONTAINMENT SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
93-09 #121 CTN-SP RAW WATER PUMP DISCHARGE CHK VALVE	3 A-4	C	12.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
93-10 #111 CTN-SP RAW WATER PUMP DISCHARGE CHK VALVE	3 B-4	C	12.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
93-11 #122 CTN-SP RAW WATER PUMP DISCHARGE CHK VALVE	3 G-4	C	12.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
93-12 #112 CTN-SP RAW WATER PUMP DISCHARGE CHK VALVE	3 E-4	B	12.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
93-25 #111 CONT. SPRAY HEAT EXCH. RAW WATER DISCHARGE TO TUNNEL	3 C-3	B	12.00 CHV	MOA	O	OC	-	FE-Q ST-Q(O,C) PI-R		FE-Q ST-Q(O,C) PI-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18012-C,SH.1
System : CONTAINMENT SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
93-26 #121 CONT. SPRAY HEAT EXCH. RAW WATER DISCHARGE TO TUNNEL	3 B-3	B	12.00 GTV	MOA	O	OC	-	FE-Q ST-Q(O,C) PI-R		FE-Q ST-Q(O,C) PI-R	
93-27 #122 CONT. SPRAY HEAT EXCH. RAW WATER DISCHARGE TO TUNNEL	3 F-3	B	12.00 GTV	MOA	O	OC	-	FE-Q ST-Q(O,C) PI-R		FE-Q ST-Q(O,C) PI-R	
93-28 #122 CONT. SPRAY HEAT EXCH. RAW WATER DISCHARGE TO TUNNEL	3 D-3	B	12.00 GTV	MOA	O	OC	-	FE-Q ST-Q(O,C) PI-R		FE-Q ST-Q(O,C) PI-R	
93-57 DISCH. TESTABLE CK. VLV RW PUMP #111	3 B-4	C	12.00 GTV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
93-58 #111 CONT. SPRAY RAW WATER TO CORE SPRAY LOOP #11 TESTABLE CHECK VLV.	2 C-1	C	12.00 CHV	SEA/ MAA	DE	OC	-	FE-Q(F,R)		FE-Q(F,R)	

Drawing No. : C-18012-C,SH.1
System : CONTAINMENT SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
93-59 DISCH. TESTABLE CK. VLV RW PUMP #112	3 E-3	C	12.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
93-60 #112 CONT. SPRAY RAW WATER TO CONT. SPRAY LOOP #12 TESTABLE CHECK VALVE	2 E-2	C	12.00 CHV	SEA/ MAA	DE	OC	-	FE-Q(F,R)		FE-Q(F,R)	
93-61 DISCH. TESTABLE CK. VLV RW PUMP #121	3 A-3	C	12.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
93-62 #121 CONT. SPRAY RAW WATER TO CONT. SPRAY LOOP #11, TESTABLE CHECK VALVE	2 A-2	C	12.00 CHV	SEA/ MAA	DE	OC	-	FE-Q(F,R)		FE-Q(F,R)	
93-63 DISCH. TESTABLE CK. VLV RW PUMP #122	3 F-3	C	12.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	

Drawing No. : C-18012-C,SH.1
System : CONTAINMENT SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
93-64 #122 CONT. SPRAY RAW WATER TO CORE SPRAY LOOP #12 TESTABLE CHECK VALVE	2 F-1	C	12.00 CHV	SEA/ MAA	DE	OC	-	FE-Q(F,R)		FE-Q(F,R)	
93-71 #111 CONT. SPRAY RAW WATER TO CORE SPRAY LOOP #11 FLOW CONTROL VALVE	2 C-1	B	12.00 PGV	MOA	C	OC	-	FE-Q ST-Q(O,C) PI-R		FE-Q ST-Q(O,C) PI-R	
93-72 #112 CONT. SPRAY RAW WATER TO CONT. SPRAY LOOP #12 FLOW CONTROL VALVE	2 E-2	B	12.00 PGV	MOA	C	OC	-	FE-Q ST-Q(O,C) PI-R		FE-Q ST-Q(O,C) PI-R	
93-73 #121 CONT. SPRAY RAW WATER TO CONT. SPRAY LOOP #11 FLOW CONTROL VALVE	2 A-2	B	12.00 PGV	MOA	C	OC	-	FE-Q ST-Q(O,C) PI-R		FE-Q ST-Q(O,C) PI-R	
93-74 #122 CONT. SPRAY RAW WATER TO CORE SPRAY LOOP #12 FLOW CONTROL VALVE	2 F-1	B	12.00 PGV	MOA	C	OC	-	FE-Q ST-Q(O,C) PI-R		FE-Q ST-Q(O,C) PI-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18012-C,SH.2
System : CONTAINMENT SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
80-01 CTN. SP PUMP SUCTION VALVE	2 C-5	A	12.00 GTV	MOA	O	OC	-	FE-Q ST-Q(O,C) PI-R LA-R		FE-Q ST-Q(O,C) PI-R LA-R	
80-02 CTN. SP PUMP SUCTION VALVE	2 D-6	A	12.00 GTV	MOA	O	OC	-	FE-Q ST-Q(O,C) PI-R LA-R		FE-Q ST-Q(O,C) PI-R LA-R	
80-05 #121 CTN-SP PUMP DISCHARGE CHK VALVE	2 A-5	C	12.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-2	PE-Q(F) FE-R(F)	
80-06 #111 CTN-SP PUMP DISCHARGE CHK VALVE	2 B-5	C	12.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-2	PE-Q(F) FE-R(F)	
80-114 C.S TO RADWASTE I.V.	2 H-2	B	4.00 PGV	MOA	C	C	-	FE-Q ST-Q(C) PI-R		FE-Q ST-Q(C) PI-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18012-C,SH.2
System : CONTAINMENT SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
80-115 C.S TO RADWASTE I.V.	2 H-2	B	4.00 PGV	MOA	C	C	-	FE-Q ST-Q(C) PI-R		FE-Q ST-Q(C) PI-R	
80-118 C.S. TEST LINE TO TORUS FCV	2 F-4	B	6.00 GLV	MOA	C	OC	-	FE-Q ST-Q(O,C) PI-R		FE-Q ST-Q(O,C) PI-R	NOTE 2
80-15 CTN-SP INLET IV - 121	2 C-2	B	12.00 GTV	APA	O	OC	O	FE-Q ST-Q(O,C) FS-Q(O) PI-R		FE-Q ST-Q(O,C) FS-Q(O) PI-R	NOTE 1,2
80-16 CTN-SP INLET IV-111	2 C-3	B	12.00 GTV	APA	O	OC	O	FE-Q ST-Q(O,C) FS-Q(O) PI-R		FE-Q ST-Q(O,C) FS-Q(O) PI-R	NOTE 1,2
80-17 #121 CTN-SP LOOP CHECK VALVE TO DRYWELL SPARGER	2 D-2	C	12.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-1	PE-R(F) DI-RS(F)	NOTE 2

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18012-C,SH.2
System : CONTAINMENT SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
80-18 #111 CTN-SP LOOP CHECK VALVE TO DRYWELL SPARGER	2 C-3	C	12.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-1	PE-RS(F) DI-RS(F)	NOTE 2
80-19 #112 CTN-SP LOOP CHECK VALVE TO TORUS SPARGER	2 F-3	C	3.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-1	DI-RS(F)	
80-21 CTN. SP PUMP SUCTION VALVE	2 F-5	A	12.00 GTV	MOA	O	OC	-	FE-Q ST-Q(O,C) PI-R LA-R		FE-Q ST-Q(O,C) PI-R LA-R	
80-22 CTN. SP PUMP SUCTION VALVE	2 E-6	A	12.00 GTV	MOA	O	OC	-	FE-Q ST-Q(O,C) PI-R LA-R		FE-Q ST-Q(O,C) PI-R LA-R	
80-25 #122 CTN-SP PUMP DISCHARGE CHK VALVE	2 H-6	C	12.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-2	PE-Q(F) FE-R(F)	

Drawing No. : C-18012-C,SH.2
System : CONTAINMENT SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
80-26 #112 CTN-SP PUMP DISCHARGE CHK VALVE	2 G-5	C	12.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-2	PE-Q(F) FE-R(F)	
80-35 CTN-SP-INLET I.V.-122	2 F-2	B	12.00 GTV	APA	O	OC	O	FE-Q ST-Q(O,C) FS-Q(O) PI-R		FE-Q ST-Q(O,C) FS-Q(O) PI-R	NOTE 1,2
80-36 CTN-SP-INLET I.V.-112	2 F-3	B	12.00 GTV	APA	O	OC	O	FE-Q ST-Q(O,C) FS-Q(O) PI-R		FE-Q ST-Q(O,C) FS-Q(O) PI-R	NOTE 1,2
80-37 #122 CTN-SP LOOP CHECK VALVE TO DRYWELL	2 E-2	C	12.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-1	PE-R(F) DI-RS(F)	NOTE 2
80-38 #112 CTN-SP LOOP CHECK VALVE TO DRYWELL SPARGER	2 E-3	C	12.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-1	PE-R(F) DI-RS(F)	NOTE 2

Drawing No. : C-18012-C,SH.2
System : CONTAINMENT SPRAY

REPORT DATE: 10/13/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
80-39 #111 CTN-SP LOOP CHECK VALVE TO TORUS SPARGER	2 C-3	C	3.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-1	DI-RS(F)	
80-41 BYPASS TO TORUS FOR LOOP #121	2 B-1	B	6.00 GTV	APA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	
80-44 BYPASS TO TORUS FOR LOOP #112	2 G-2	B	6.00 GTV	APA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	
80-65 #12 CONT. SPRAY STRAINER OUTLET CHECK TO TORUS	2 C-3	C	3.00 GTV	SEA	DE	O	-	FE-Q(F)	RR-1	PE-RS(F) DI-RS(F)	NOTE 2
80-66 #121 CTN-SP LOOP CHECK VALVE TO TORUS SPARGER	2 C-3	C	3.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-1	DI-RS(F)	

Drawing No. : C-18012-C,SH.2
System : CONTAINMENT SPRAY

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
80-67 #11 CONT. SPRAY STRAINER OUTLET CHECK TO TORUS	2 E-3	C	3.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-1	PE-RS(F) DI-RS(F)	NOTE 2
80-68 #122 CTN-SP LOOP CHECK VALVE TO TORUS	2 F-2	C	3.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-1	DI-RS(F)	

NOTES FOR CONTAINMENT SPRAY VALVE TABLE

1. Valves 80-15, 80-16, 80-35, 80-36 fail open on loss of electrical power but fail as is on loss of air. These valves are normally open during plant operation and only closed for surveillance testing, torus cooling, or maintenance operations. Because these functions only isolate one loop at any one time and leave the other three loops available for service, these valves will be tested to fail to the proper position on loss of electrical power only. The fail as is, on loss of air, is not a safety-related function and will not be tested.

2. 10CFR50, Appendix J requirements for the Containment Spray System are currently satisfied using a water seal methodology. During the 1994/1995 refuel outage, modifications will be performed to allow 10CFR50, Appendix J Type C testing of these valves in lieu of the water seal methodology. Starting at the refueling outage no. 13 scheduled in 1994/1995. These valves will be classified as Containment Isolation Valves and will receive Type C testing (LJ-R). The IST Program will be revised to reflect these changes following the completion of the 1994/1995 refuel outage.

RELIEF REQUEST

CTS-RR-1

System	:	Containment Spray
Valves	:	80-17, 80-18, 80-19, 80-37, 80-38, 80-39, 80-65, 80-66, 80-67, 80-68
Category	:	C
Class	:	2
Function	:	Containment Spray Check Valves
ASME Section XI Quarterly Test Requirements	:	Verify forward flow opening and reverse flow closure IWV-3522 quarterly IWV-3521
Basis for Relief	:	Verification of forward flow operability, using system pumps, would require spraying torus water into the drywell and torus. This would result in damage to equipment located inside the drywell. Disassembly of the valves for inspection of integrity is not feasible for all valves since tilting disc valves are welded in place. Some of the 3" valves can be examined by breaking the split body flange of the tilting disc check valve and cold springing the line to gain access to the internals. Some of the 12" valves can be examined remotely using a boroscope by removing the bonnet of adjacent gate valves. The valves do not have a removeable valve bonnet or inspection cover, and are designed with stationary hinge pins such that external observation during exercising or attachment of an external exerciser is not feasible.
Alternate Testing	:	Permanently installed compressed air test lines have been included in the system design. These compressed air lines are used to partially exercise the drywell

check valves. System piping configuration prevents detection of sufficient flow to credit a partial exercise for the 3" check valves (e.g., most flow goes to the drywell, making detection in the torus very difficult). Each of the 3" valves, 80-65 and 80-67, can be partially exercised by using a compressed air hookup on an upstream strainer connection. Due to the limited access in the torus, the partial exercise on check valves 80-65 and 80-67 will be coordinated with the nozzle air flow test and will be done on an alternating outage schedule (e.g., flow through 80-65 for the nozzle test will be at one refueling outage, and flow through 80-67 will be done the next refueling outage). This test is performed at refueling when the containment is de-inerted and entry can be made to witness testing.

The partial exercise test using compressed air for the four 12" valves and remote visual exam of valve internals for at least one 12" valve each outage will be used until a permanent plant modification (1994) to permit full exercising or valve replacement is completed. The six 3" check valves will be examined on a staggered basis by cold springing the lines until the modification is completed at refueling outage no. 13 scheduled in 1994/1995. Modifications to these valves to permit either full exercising or valve replacement shall be performed on a staggered basis over a 6-year period until all are complete. If any existing valve in a group fails the examination, all remaining modifications for that group size shall be completed and examined. Examinations shall be on a staggered basis, with at least one valve from each group examined each outage. No single valve shall have its examination frequency exceed a six-year period.

Relief Request CTS-RR-1 Cont'd.

Examination shall consist of gaining access to the internals (e.g., by removing an inspection port or a spool piece, breaking body flange and cold springing line, bonnet cover removal, etc.). The disc will be manually exercised (e.g., by hand or by using a rod that is inserted through the access opening, etc.). The visual examination will take place when the tilting disc is fully open. No torque will be measured.

RELIEF REQUEST

CTS-RR-2

System	:	Containment Spray
Valves	:	80-05, 80-06, 80-25, 80-26
Category	:	C
Class	:	2
Function	:	Containment Spray Pump Discharge Check Valves
ASME Section XI Quarterly Test Requirements	:	Verify forward flow opening IWV-3522
Basis for Relief	:	These valves are the pump discharge valves. They are split body (flange) tilting disc check valves with the valve-to-pipe joint welded into the discharge line. These valves are tested quarterly during the surveillance test of the containment spray pump. The flow path during the quarterly test uses a downstream branch line that returns flow to the torus. The test flow rate is limited to approximately 2900 gpm (two loops achieve almost 3000 gpm due to the piping configuration of the cross connect header and the single test line to the torus). From manufacturer's published information, it has been conservatively determined that these valves should be fully opened at a flow rate of about 2200 gpm. Testing and subsequent analysis performed during late 1989 and early 1990 resulted in a change in the design flow rate from 3000 to 3600 gpm. The required system flow path is from the torus to the containment spray headers, which is not available for inservice testing (e.g., spraying the drywell could damage equipment and require extensive cleanup and testing to be performed).

Basis for Relief : The only two alternatives regarding the long-term solution for these valves are to either perform modifications to permit disassembly and inspection (currently welded in place) or to perform non-intrusive testing to confirm that the disk is full open at the test flow rate.

Based on the manufacturer's estimation that the valves should be full open at 2200 gpm, and that the test flow rate during quarterly testing is approximately 2900 gpm, non-intrusive testing is an acceptable alternative to disassembly and inspection. Non-intrusive testing is actually more desirable since it would avoid the need to perform modifications starting in the 1993 Refueling Outage. In addition, as evidenced in the NRC's Safety Evaluation dated March 7, 1991, the NRC does not endorse disassembly and inspection unless it can be demonstrated that no other alternative exists.

Non-intrusive testing will, therefore, be selected as the long-term solution for these valves. The frequency of performing non-intrusive testing should be once per operating cycle (every two years) for each valve. The justification for this is as follows:

- It is expected that considerable equipment setup time will be required (temporary modification to install transducers), as well as extending the duration of the test to acquire the necessary data.

RELIEF REQUEST CTS-RR-2 (Cont'd.)

Basis for Relief :

- Non-intrusive testing is expected to provide additional information about a check valve's overall condition above that obtained through normal full foward flow testing. This will provide an added measure of the operational readiness of these valves.

- Quarterly partial stroke testing is performed at substantial flow (2900 gpm) and is expected to exercise the valve disk to the full open position based on manufacturer's information. This testing, when combined with the non-intrusive test every refueling outage (two years), should provide reasonable assurance that the valves are operating properly.

Alternate Testing :

A. As described above, all valves are partially exercised quarterly with 2900 gpm flow.

B. Non-intrusive testing will be performed once per refueling outage (two years) for all check valves starting in the 1993 Refueling Outage.

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18009-C,SH.1
System : REACTOR CLEAN-UP

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
33-01R RCU RETURN ISOLATION VALVE (INSIDE)	1 C-1	A	6.00 GTV	MOA	O	C	-	FE-Q ST-Q(C) LJ-R PI-R		FE-Q ST-Q(C) LJ-R PI-R	
33-02R RCU SUPPLY ISOLATION VALVE (OUTSIDE)	1 A-2	A	6.00 GTV	MOA	O	C	-	FE-Q ST-Q(C) LJ-R PI-R		FE-Q ST-Q(C) LJ-R PI-R	
33-03 RCU RETURN ISOLATION VALVE (OUTSIDE)	1 C-1	A,C	6.00 CHV	SEA	DE	C	-	FE-Q(R) LJ-R	CS-1	FE-C(R) LJ-R	
33-04 RCU SUPPLY ISOLATION VALVE 12 (OUTSIDE)	1 A-2	A	6.00 GTV	MOA	O	C	-	FE-Q ST-Q(C) LJ-R PI-R		FE-Q ST-Q(C) LJ-R PI-R	

COLD SHUTDOWN TEST JUSTIFICATION

RCU-CS-1

System	:	Reactor Clean-up
Valve	:	33-03
Category	:	A,C
Class	:	1
Function	:	Containment Isolation Check Valve (reverse flow closure for containment isolation only)
ASME Section XI Quarterly Test Requirements	:	Verify reverse flow closure IWV-3522 quarterly IWV-3521.
Cold Shutdown Test Justification	:	This check valve is on the cleanup return to reactor line and located in a relatively high radiation area (100-150 mR/hr at contact to valve, 100-500 mR/hr general area). In order to adequately reverse flow test, this valve would require pressurizing the down stream side of the valve, using a hydro pump setup. This procedure would generally take 1-2 hours to perform, using a minimum of 3, possibly 4, technicians. Potential exposures could be as high as 1000 mR total dose received each time the test is performed, which is in conflict with the NMPC ALARA Program. In addition, opening the drain valve downstream of this check valve introduces a personnel safety concern with the reactor at pressure since there exists only one valve boundary from reactor coolant. Testing this valve quarterly is impractical.
Cold Shutdown Testing	:	Reverse flow closure will be verified during cold shutdown. Reverse flow testing during refueling outages will be verified through Appendix J, Type C testing.

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18014-C,SH.1
System : INERT GAS PURGE

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201-07 TORUS AIR VENT & PURGE I.V. #12	2 A-6	A	20.00 BFV	MOA	C	C	-	FE-Q ST-Q(C) LJ-R PI-R		FE-Q ST-Q(C) LJ-R PI-R	
201-08 TORUS AIR VENT & PURGE I.V. #11	2 B-6	A	20.00 BFV	APA	C	C	C	FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R	
201-09 DRYWELL AIR VENT & PURGE I.V. #12	2 B-4	A	24.00 BFV	MOA	C	C	_	FE-Q ST-Q(C) LJ-R PI-R		FE-Q ST-Q(C) LJ-R PI-R	
201-10 DRYWELL AIR VENT & PURGE I.V. #11	2 B-4	A	24.00 BFV	APA	C	C	C	FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R	
201-16 TORUS N2 VENT & PURGE INSIDE I.V.	2 G-5	A	20.00 BFV	APA	C	C	C	FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18014-C,SH.1
System : INERT GAS PURGE

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201-17 TORUS N2 VENT & PURGE OUTSIDE I.V.	2 H-5	A	20.00 BFV	MOA	C	C	_	FE-Q ST-Q(C) PI-R LJ-R		FE-Q ST-Q(C) PI-R LJ-R	
201-31 DRYWELL N2 VENT & PURGE OUTSIDE I.V.	2 F-2	A	24.00 BFV	MOA	C	C	-	FE-Q ST-Q(C) LJ-R PI-R		FE-Q ST-Q(S) LJ-R PI-R	
201-32 DRYWELL N2 VENT & PURGE INSIDE I.V.	2 F-2	A	24.00 BFV	APA	C	C	C	FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R	
201.1-09 POST LOCA. AOV INSIDE I.V.	2 F-2	A	1.00 GLV	NPA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 1
201.1-11 POST LOCA. AOV OUTSIDE I.V.	2 F-2	A	1.00 GLV	NPA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 1

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18014-C,SH.1
System : INERT GAS PURGE

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.1-14 POST LOCA. VENT AOV INSIDE I.V.	2 D-2	A	1.00 GLV	APA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 2
201.1-16 POST LOCA. VENT AOV OUTSIDE I.V.	2 C-2	A	1.00 GLV	APA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 2
201.2-02 DRYWELL N2 BLEED B.V.	2 F-3	B	1.00 GLV	ADA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	
201.2-03 DRYWELL N2 MAKEUP & BLEED OUTSIDE I.V.	2 F-2	A	4.00 GLV	ADA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	
201.2-04 TORUS N2 MAKEUP B.V.	2 F-4	B	1.00 GLV	ADA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18014-C,SH.1
System : INERT GAS PURGE

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.2-05 N2 SUPPLY VALVE	3 F-4	B	3.00 GLV	ADA	C	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	
201.2-06 TORUS N2 MAKEUP & BLEED OUTSIDE I.V.	2 F-4	A	3.00 GLV	NDA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	
201.2-08 N2 SUPPLY VALVE	3 F-3	B	4.00 GLV	ADA	C	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	
201.2-32 DRYWELL N2 MAKEUP & BLEED INSIDE I.V.	2 F-2	A	4.00 GLV	ADA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	
201.2-33 TORUS N2 MAKEUP & BLEED INSIDE I.V.	2 F-5	A	3.00 GLV	NDA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	

Drawing No. : C-18014-C,SH.1
System : INERT GAS PURGE

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.9-46 N2 B.V. TO DRYWELL	2 E-3	B	1.50 GTV	APA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	
201.9-47 N2 B.V. TO TORUS	2 E-4	B	1.50 GTV	NPA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	

NOTES FOR INERT GAS PURGE AND FILL VALVE TABLE

1. These valves are grouped together (2 total). Each valve has two separate solenoids. Each valve pair has three indicating lights. The longest stroke time for both valves in the group will be used as the IST stroke time.

2. These valves are grouped together (2 total). Each valve has two separate solenoids. Each valve pair has three indicating lights. The longest stroke time for both valves in the group will be used as the IST stroke time.

Drawing No. : C-18014-C,SH.2
System : HYD-OXY MONITOR.

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.2-109 H202 SYSTEM #11 RETURN TO TORUS INSIDE I.V.	2 B-5	A	0.75 GLV	ADA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 1
201.2-110 H202 SYSTEM #11 TORUS SAMPLE INSIDE I.V.	2 C-4	A	0.75 GLV	ADA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 1
201.2-111 H202 SYSTEM #11 TORUS SAMPLE OUTSIDE I.V.	2 C-5	A	0.75 GLV	ADA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 1
201.2-112 H202 SYSTEM #11 RETURN TO TORUS OUTSIDE I.V.	2 B-5	A	0.75 GLV	ADA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 1
201.2-23 H202 SYSTEM #12 TORUS SAMPLE INSIDE I.V.	2 E-5	A	0.50 GLV	SOA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 2

Drawing No. : C-18014-C,SH.2
System : HYD-OXY MONITOR.

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.2-24 H202 SYSTEM #12 TORUS SAMPLE OUTSIDE I.V.	2 E-5	A	0.50 GLV	SOA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 2
201.2-25 H202 SYSTEM #12 DRYWELL SAMPLE INSIDE I.V.	2 E-4	A	0.50 GLV	SOA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 2
201.2-26 H202 SYSTEM #12 DRYWELL SAMPLE OUTSIDE I.V.	2 E-4	A	0.50 GLV	SOA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 2
201.2-27 H202 SYSTEM #12 DRYWELL SAMPLE INSIDE I.V.	2 E-4	A	0.50 GLV	SOA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 2
201.2-28 H202 SYSTEM #12 DRYWELL SAMPLE OUTSIDE I.V.	2 E-4	A	0.50 GLV	SOA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 2

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18014-C,SH.2
System : HYD-OXY MONITOR.

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.2-29 H202 SYSTEM #12 DRYWELL SAMPLE INSIDE I.V.	2 E-3	A	0.50 GLV	SOA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 2
201.2-30 H202 SYSTEM #12 DRYWELL SAMPLE OUTSIDE I.V.	2 E-3	A	0.50 GLV	SOA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 2
201.2-67 H202 SYSTEM #12 SAMPLE RETURN TO DRYWELL IN I.V.	2 E-5	A,C	0.75 CHV	SEA	DE	OC	-	FE-Q(F,R) LJ-R		FE-Q(F,R) LJ-R	
201.2-68 H202 SYSTEM #12 SAMPLE RETURN TO DRYWELL OUT I.V.	1 F-5	A,C	0.75 CHV	SEA	DE	OC	-	FE-Q(F,R) LJ-R		FE-Q(F,R) LJ-R	
201.2-70 H202 SYSTEM #12 SAMPLE RETURN TO TORUS INSIDE I.V.	2 F-5	A,C	0.75 CHV	SEA	DE	OC	-	FE-Q(F,R) LJ-R		FE-Q(F,R) LJ-R	

Drawing No. : C-18014-C,SH.2
System : HYD-OXY MONITOR.

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.2-71 H202 SYSTEM #12 SAMPLE RETURN TO TORUS OUTSIDE I.V.	2 G-5	A,C	0.75 CHV	SEA	DE	OC	-	FE-Q(F,R) LJ-R		FE-Q(F,R) LJ-R	
201.7-01 H202 SYSTEM #11 SAMPLE STEAM B INSIDE I.V.	2 C-2	A	1.00 GLV	ADA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 1
201.7-02 H202 SYSTEM #11 SAMPLE STEAM B OUTSIDE I.V.	2 C-2	A	1.00 GLV	ADA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q LJ-R PI-R	NOTE 1
201.7-03 H202 SYSTEM #11 DRYWELL SAMPLE STREAM A INSIDE I.V.	2 C-3	A	1.00 GLV	ADA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 1
201.7-04 H202 SYSTEM #11 DRYWELL SAMPLE STREAM A OUTSIDE I.V.	2 C-3	A	1.00 GLV	ADA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 1

Drawing No. : C-18014-C,SH.2
System : HYD-OXY MONITOR.

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.7-08 DRYWELL CAM SAMPLE LINE INSIDE I.V.	2 E-2	A	1.00 GLV	ADA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 3
201.7-09 DRYWELL CAM SAMPLE LINE OUTSIDE I.V.	2 E-2	A	1.00 GLV	ADA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 3
201.7-10 H202 SYSTEM #11 RETURN TO DRYWELL INSIDE I.V.	2 E-3	A	1.00 GLV	ADA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 3
201.7-11 H202 SYSTEM #11 RETURN TO DRYWELL OUTSIDE I.V.	2 E-3	A	1.00 GLV	ADA	O	OC	C	FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(C) LJ-R PI-R	NOTE 3

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-26939-C
System : HYD-OXY MONITOR.

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.2-251 H202 SYSTEM #12 STREAM "A" SAMPLE B.V.	N C-1/2	B	0.50 BLV	ADA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O)		FE-Q ST-Q(O,C) FS-Q(O)	
201.2-252 H202 SYSTEM #12 STREAM "B" SAMPLE B.V.	N C-2/3	B	0.50 BLV	ADA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O)		FE-Q ST-Q(O,C) FS-Q(O)	
201.2-253 H202 SYSTEM #12 STREAM "C" SAMPLE B.V.	N C-3/4	B	0.50 BLV	ADA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O)		FE-Q ST-Q(O,C) FS-Q(O)	
201.2-254 H202 SYSTEM #12 STREAM "D" SAMPLE B.V.	N C-4/5	B	0.50 BLV	ADA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O)		FE-Q ST-Q(O,C) FS-Q(O)	
201.2-305 H202 SYSTEM #12 RET. CHECK VALVE	N K/L-4	C	0.50 BLV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-26939-C
System : HYD-OXY MONITOR.

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.2-413 H202 SYSTEM #12 SAMPLE RETURN TO CONT.	N L-4	B	0.50 TWV	ADA	C	OC	-	FE-Q(O,C)		FE-Q(O,C)	

Drawing No. : C-26949-C
System : HYD-OXY MONITOR.

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.2-141 H202 SYSTEM #11 STREAM "A" SAMPLE B.V.	N C-1/2	B	0.50 BLV	ADA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O)		FE-Q ST-Q(O,C) FS-Q(O)	
201.2-142 H202 SYSTEM #11 STREAM "B" SAMPLE B.V.	N C-2/3	B	0.50 BLV	ADA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O)		FE-Q ST-Q(O,C) FS-Q(O)	
201.2-143 H202 SYSTEM #11 STREAM "C" SAMPLE B.V.	N C-3/4	B	0.50 BLV	ADA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O)		FE-Q ST-Q(O,C) FS-Q(O)	
201.2-192 H202 SYSTEM #11 RET. CHECK VALVE	N K/L-4	C	0.50 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
201.2-414 H202 SYSTEM #11 SAMPLE RETURN TO CONT.	N L-4	B	0.50 TWV	ADA	C	OC	-	FE-Q(O,C)		FE-Q(O,C)	

NOTES FOR HYDROGEN-OXYGEN MONITORING SYSTEM VALVE TABLE

1. These valves are grouped together (8 total). Each valve has two separate solenoids. Each valve pair has three indicating lights. The longest stroke time for all valves in the group will be used as the IST stroke time.

2. These valves are grouped together (8 total). These valves are designated as rapid acting valves. The group will be tested together to verify all valves meet the 2-second maximum limiting valve full-stroke time.

3. These valves are grouped together (4 total). Each valve has two separate solenoids. Each valve pair has three indicating lights. The longest stroke time for all valves in the group will be used as the IST stroke time.

Drawing No. : C-18014-C,SH.2
System : TRANS. INCR. PRB.

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.2-39 N2 PURGE TIP INDEXERS	2 E-1	A,C	0.75 CHV	SEA	DE	C	-	FE-Q(R) LJ-R		FE-Q(R) LJ-R	
201.2-40 N2 PURGE TIP INDEXERS	2 E-1	A,C	0.75 CHV	SEA	DE	C	-	FE-Q(R) LJ-R		FE-Q(R) LJ-R	
36-147 #1 TIP (BALL) MACH. DRIVE & CONTROL	2 D-1	A	0.50 BLV	SOA	C	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R LJ-R		FE-Q ST-Q(C) FS-Q(C) PI-R LJ-R	NOTE 1
36-148 #2 TIP (BALL) MACH. DRIVE & CONTROL	2 D-1	A	0.50 BLV	SOA	C	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R LJ-R		FE-Q ST-Q(C) FS-Q(C) PI-R LJ-R	NOTE 1
36-149 #3 TIP (BALL) MACH. DRIVE & CONTROL	2 D-1	A	0.50 BLV	SOA	C	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R LJ-R		FE-Q ST-Q(C) FS-Q(C) PI-R LJ-R	NOTE 1

Drawing No. : C-18014-C,SH.2
System : TRANS. INCR. PRB.

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
36-150 #4 TIP (BALL) MACH. DRIVE & CONTROL	2 D-1	A	0.50 BLV	SOA	C	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R LJ-R		FE-Q ST-Q(C) FS-Q(C) PI-R LJ-R	NOTE 1
36-151 TIP-1 (SHEAR)	2 D-1	D	0.50 EXV	EXA	O	C	-	EX-P		EX-P	NOTES 1,2
36-152 TIP-2 (SHEAR)	2 D-1	D	0.50 EXV	EXA	O	C	-	EX-P		EX-P	NOTES 1,2
36-153 TIP-3 (SHEAR)	2 D-1	D	0.50 EXV	EXA	O	C	-	EX-P		EX-P	NOTES 1,2
36-154 TIP-4 (SHEAR)	2 D-1	D	0.50 EXV	EXA	O	C	-	EX-P		EX-P	NOTES 1,2

NOTES FOR TRANSVERSE INCORE PROBE SYSTEM VALVE TABLE

1. Tip Ball and Shear Valves are not shown on the P&ID.

2. The Tip Shear Valves are explosive actuated valves which are used to provide a containment isolation barrier should the Ball Valves fail to operate properly.

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18014-C,SH.3
System : N2 SUPPLY #11

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.9-10 N2 STORAGE TANK PSV	3 C/D-1/2	C	1X1 REV	SEA	C	O	-	RT-P		RT-P	
201.9-11 N2 STORAGE TANK PSV	3 C-1/2	C	1X1 REV	SEA	C	O	-	RT-P		RT-P	
201.9-14 N2 PRESS. AMB VAP PSV	3 D-2	C	0.5X. REV	SEA	C	O	-	RT-P		RT-P	
201.9-17 #11 N2 STORAGE TANK LIQUID WITHDRAWAL B.V.	3 D-3	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	
201.9-19 #11 N2 STORAGE TANK LIQUID WITHDRAWAL B.V.	3 E-3	B	1.00 GTV	NDA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O) PI-R		FE-Q ST-Q(O,C) FS-Q(O) PI-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18014-C,SH.3
System : N2 SUPPLY #11

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.9-24 140#PSV AFTER AMBIENT VAPORIZER	3 F-3	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	
201.9-25 #11 N2 STORAGE TANK 140 #PSV AFTER B.V. 201.9-19	3 E-3	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	
201.9-33 N2 PRESS. AMB VAP PSV	3 E-4	C	0.5X. REV	SEA	C	O	-	RT-P		RT-P	
201.9-40 N2 PRESS. BLDG. COIL PSV	3 C-4	C	0.5X. REV	SEA	C	O	-	RT-P		RT-P	
201.9-69 33 #PSV AFTER 201.9-48	3 G-3	C	1.00 REV	SEA	C	O	-	RT-P		RT-P	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18014-C,SH.3
System : N2 SUPPLY #11

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.9-70 33 #PSV AFTER 201.9-49	3 G-2	C	1.00 REV	SEA	C	O	-	RT-P		RT-P	
201.9-94 N2 SUPPLY TO CAD VALVE ACTUATORS	3 F-5	C	1.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	NOTE 1

NOTES FOR NITROGEN SUPPLY #11 SYSTEM VALVE TABLE

1. Forward flow opening verified by proper operation of the nitrogen supplied CAD valves.

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18014-C,SH.4
System : N2 SUPPLY #12

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.8-03 LIQUID N2 B.V. TO STM. VAPORIZER & CONTROL CABINET	3 B-2	B	1.50 REV	NDA	C	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	
201.8-04 B.V. TO 6000 SCFH AMBIENT VAPORIZER	3 D-2	B	1.00 GTV	NDA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O) PI-R		FE-Q ST-Q(O,C) FS-Q(O) PI-R	
201.8-105 N2 PRESS AMB VAP PSV (SSI-35)	3 B-4	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	
201.8-109 N2 PRESS AMB VAP PSV (SSI-37)	3 C-4	C	0.25 REV	SEA	C	O	-	RT-P		RT-P	
201.8-39 PSV TO SOV'S 201.8-03B TO 201.8-04B	3 C/D-2	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	

Drawing No. : C-18014-C,SH.4
System : N2 SUPPLY #12

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
201.8-96 #12 N2 TANK PRESS. BUILD. COIL PSV@250# (SSI-40)	3 B-2	C	1.00 REV	SEA	C	O	-	RT-P		RT-P	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18013-C
System : REAC BLDG HVAC

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
202-07 NOR. EXH. FAN #11 B.V.	3 H-2	B	12.00 BFV	ADA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O) PI-R		FE-Q ST-Q(O,C) FS-Q(O) PI-R	
202-08 NOR. EXH. FAN #12 B.V.	3 H-1	B	12.00 BFV	ADA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O) PI-R		FE-Q ST-Q(O,C) FS-Q(O) PI-R	
202-15 SUPPLY ISOLATION VLV	3 B-3	B	54.00 BFV	ADA	O	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	
202-16 SUPPLY ISOLATION VLV	3 B-3	B	54.00 BFV	ADA	O	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	
202-31 EXHAUST ISO. VLV	3 F/G-2	B	54.00 BFV	ADA	O	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18013-C
System : REAC BLDG HVAC

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
202-32 EXHAUST ISO. VLV	3 F-2	B	54.00 BFV	ADA	O	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	
202-34 EM. EXH FAN #11 OUT.	2 H-4	B	12.00 BFV	ADA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O) PI-R		FE-Q ST-Q(O,C) FS-Q(O) PI-R	
202-35 EM. EXH FAN #12 OUT.	2 H-5	B	12.00 BFV	ADA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O) PI-R		FE-Q ST-Q(O,C) FS-Q(O) PI-R	
202-36 RM. VENT SYS. INLET	2 F-2	B	12.00 BFV	ADA	O	OC	O	FE-Q ST-Q(O,C) FS-Q(O) PI-R		FE-Q ST-Q(O,C) FS-Q(O) PI-R	
202-37 LOOP #11 INLET	2 F-4	B	12.00 BFV	ADA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O) PI-R		FE-Q ST-Q(O,C) FS-Q(O) PI-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18013-C
System : REAC BLDG HVAC

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
202-38 LOOP #12 INLET	2 F-5	B	12.00 BFV	ADA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O) PI-R		FE-Q ST-Q(O,C) FS-Q(O) PI-R	
202-47 CROSS-TIE VALVE	3 G/H-4	B	2.00 BFV	ADA	C	O	O	FE-Q ST-Q(O) FS-Q(O) PI-R		FE-Q ST-Q(O) FS-Q(O) PI-R	
202-50 EXH. FAN #11 INLET FCV	3 H-4	B	12.00 BFV	ADA	O	O	O	FE-Q ST-Q(O) FS-Q(O) PI-R		FE-Q ST-Q(O) FS-Q(O) PI-R	
202-51 EXH. FAN #12 INLET FCV	3 H-5	B	12.00 BFV	ADA	O	O	O	FE-Q ST-Q(O) FS-Q(O) PI-R		FE-Q ST-Q(O) FS-Q(O) PI-R	
202-74 LOOP #11 COOLING	3 F-4	B	2.00 BFV	ADA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18013-C
System : REAC BLDG HVAC

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
202-75 LOOP #12 COOLING	3 F-5	B	2.00 BFV	ADA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18019-C
System : LIQUID POISON

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
42-19 PUMP #11 DISCH. CHK.	2 E-4	C	1.50 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-3	FE-Q(F) FE-R(R)	
42-20 PUMP #12 DISCH. CHK.	2 E-5	C	1.50 CHV	SEA	DE	OC	-	FE-Q(F,R)	RR-3	FE-Q(F) FE-R(R)	
42-34 (NP05B) EXPLOSIVE VALVE #12	2 C-5	D	1.50 EXV	EXA	C	O	-	EX-P		EX-P	
42-35 (NP05A) EXPLOSIVE VALVE #12	2 C-4	D	1.50 EXV	EXA	C	O	-	EX-P		EX-P	
42-36 (NP04B) LOOP #12 PSV	2 E-4	C	1X2 REV	SEA	DE	O	-	RT-P		RT-P	NOTE 1

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18019-C
System : LIQUID POISON

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
42-37 (NP04A) LOOP #11 PSV	2 E-3	C	1X2 REV	SEA	DE	O	-	RT-P		RT-P	NOTE 1
42.1-02 CIV INSIDE	1 A-4	A,C	2.00 CHV	SEA	DE	OC	-	FE-Q(F,R) LJ-R	RR-1,2	FE-R(F,R) LJ-R	
42.1-03 CIV OUTSIDE	1 B-4	A,C	2.00 CHV	SEA	DE	OC	-	FE-Q(F,R) LJ-R	RR-1,2	FE-R(F,R) LJ-R	

NOTES FOR LIQUID POISON SYSTEM VALVE TABLE

1. Per Appendix B-92-002, the valve is safety-related passive; the test is to satisfy INPO SER 26-88.

RELIEF REQUEST

LP-RR-1

System	:	Liquid Poison
Valves	:	42.1-02, 41.2-03
Category	:	A,C
Class	:	1
Function	:	Liquid Poison Injection Line Check Valves
ASME Section XI Quarterly Test Requirements	:	Verify forward flow opening IWV-3522 quarterly IWV-3521
Basis for Relief	:	Verification of forward flow operability during normal operation would require firing a squib valve and injecting cold demineralized water into the reactor vessel, using the liquid poison pumps. Injecting water during operation could result in adverse plant conditions, such as changes in reactivity, power transients, thermal shock induced cracking, and a possible plant trip. Verification of forward flow operability during cold shutdowns would also require firing a squib valve and injecting demineralized water into the vessel. Firing a squib valve during cold shutdowns requires a whole series of tests in itself (testing a charge from a new batch of explosive charges, installation/replacement of old fired charge, leak testing following reassembly, etc.). The scope of this type of test would also most likely delay start up.
Alternate Testing	:	Verify forward flow opening during refueling during the liquid poison system injection test which pumps demineralized water into the reactor vessel

RELIEF REQUEST

LP-RR-2

System	:	Liquid Poison
Valves	:	42.1-02, 42.1-03
Category	:	A,C
Class	:	1
Function	:	Containment Isolation Check Valves (reverse flow closure for containment isolation)
ASME Section XI Quarterly Test Requirements	:	Verify reverse flow closure IWV-3522 quarterly IWV-3521
Basis for Relief	:	These valves are normally closed and are only opened during refueling outages when the simulated injection test of liquid poison is performed. The valves are then verified closed by performing an Appendix J, Type C leak test. A containment entry is required to perform this leak test. Since the containment is normally inerted, it is not feasible to perform the test during normal operation or cold shutdowns.
Alternate Testing	:	Reverse flow closure will be verified during Appendix J, Type C testing at refueling.

RELIEF REQUEST

LP-RR-3

System	:	Liquid Poison
Valves	:	42-19, 42-20
Category	:	C
Class	:	2
Function	:	Liquid Poison Pumps Discharge Check Valves
ASME Section XI Quarterly Test Requirements	:	Verify reverse flow closure IWV-3522 quarterly IWV-3521
Basis for Relief	:	The Liquid Poison pumps are positive displacement pumps and will not permit flow through them in the reverse direction. These connections were not provided between the discharge of the Liquid Poison pumps and pump discharge check valves. Therefore, the only means to establish a vent path is by removing a component (i.e., accumulator or relief valve). The alteration of the normal system lineup, plus the intrusion into the system (both pressure source and vent path), makes both quarterly and cold shutdown testing impractical.
Alternate Testing	:	Reverse flow closure will be verified at refueling. At the next refueling outage (1993), a modification will be performed to add the necessary test connections to permit quarterly testing.

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18008-C
System : SPENT FP COOL

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
54-12 FILTER #12 LOOP INLET B.V.	3 E-5	B	6.00 BFV	ADA	DE	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	
54-129 (FP-312) RX HEAD CAVITY CHECK VALVE TO SIPHON BRKR	3 B-1	C	0.75 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	NOTE 1
54-13 FILTER #13 LOOP INLET B.V.	3 E-4	B	6.00 BFV	ADA	DE	OC	C	FE-Q ST-Q(O,C) FS-Q(C) PI-R		FE-Q ST-Q(O,C) FS-Q(C) PI-R	
54-131 (FP-310) FUEL POOL LOOP RETURN - CHECK VALVE TO SIPHON BRKR	3 D-1	C	2.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-1	FE-Q(F)	
54-133 (FP-308) FUEL POOL LOOP RETURN - CHECK VALVE TO SIPHON BRKR	3 D-1	C	2.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-1	FE-Q(F)	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18008-C
System : SPENT FP COOL

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
54-146 (FP-314) RX HEAD CAVITY CHECK VALVE TO SIPHON BRKR	3 D-1	C	0.75 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	NOTE 1
54-45 HEAT EXCHANGER #12 OUTLET CHECK VALVE	3 G-5	C	6.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
54-46 HEAT EXCHANGER #11 OUTLET CHECK VALVE	3 G-4	C	6.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
54-71 FUEL POOL LOOP INTAKE CHECK VALVE	3 D-1	C	6.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
54-72 FUEL POOL LOOP INTAKE CHECK VALVE	3 C-1	C	6.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18008-C
System : SPENT FP COOL

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
57-03 FUEL POOL LEVEL CONTROL CHECK	3 C-2	C	3.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	

NOTES FOR SPENT FUEL STORAGE POOL FILTERING AND COOLING SYSTEM VALVE TABLE

1. 54-129 (FP-312) and 54-146 (FP-314) will be declared "out of Service" during periods when the reactor head cavity and the reactor internal storage pit are empty. Within 30 days prior to return of these valves to operable status, the valves will be exercised (pop test) and the schedule resumed (quarterly testing) until the valves are again declared "out of service".

RELIEF REQUEST

SFSPFC-RR-1

System	:	Spent Fuel Storage Pool Filtering and Cooling
Valves	:	54-13 (FP-310), 54-133 (FP-308)
Category	:	C
Class	:	3
Function	:	Fuel Pool Siphon Breakers
ASME Section XI Quarterly Test Requirements	:	Exercise, observe force or torque limitations of IWV-3522(b) quarterly IWV-3521
Basis for Relief	:	Valves FP-308 and FP-310 have no means for opening these valves other than manually exercising. Also, the valves have no provisions for installation of a torque wrench for the purpose of measuring the torque or force needed to operate the valve.
Alternate Testing	:	Exercising of these valves will be verified by hand exercising on a quarterly basis. The attributes utilized during this method are as follows: 1) fully exercise open by hand; 2) inspect for foreign material; 3) inspect for damaged seat and disc; and 4) gravity return close.

Drawing No. : C-18041-C,SH. 2
System : SAMPLE SYSTEM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
110-165 REACTOR VESSEL SAMPLE IV	1 F-4	A	0.75 GLV	MAA	C	C	-	PV LJ-R		PV LJ-R	
110-166 REACTOR VESSEL SAMPLE IV	1 F-4	A	0.75 GLV	MAA	C	C	-	PV LJ-R		PV LJ-R	

Drawing No. : C-18041-C,SH. 7
System : SAMPLE SYSTEM

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
122-03 POST-ACCIDENT SAMPLE IV	2 A-3	A	1.00 GLV	ADA	C	C	C	FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R	

Drawing No. : C-18008-C
System : R. BLDG. CL. LOOP

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
70-68 CLC TO SF HX #11	3 H-3	B	6.00 GLV	APA	DE	O	O	FE-Q ST-Q(O) FS-Q(O) PI-R		FE-Q ST-Q(O) FS-Q(O) PI-R	
70-69 CLC TO SF HX #12	3 H-5	B	6.00 GLV	APA	DE	O	O	FE-Q ST-Q(O) FS-Q(O) PI-R		FE-Q ST-Q(O) FS-Q(O) PI-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18022-C,SH. 3
System : R. BLDG. CL. LOOP

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
70-257 CLC MAKEUP CHECK (EMERG)	3 D-2	C	6.00 SEA	SEA	DE	C	-	FE-Q(R)		FE-Q(R)	
70-442 (MU-7) CLC MAKEUP CHECK (NORMAL)	3 D-2	C	1.50 CHV	SEA	DE	C	-	FE-Q(R)		FE-Q(R)	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18022-C,SH. 2
System : R. BLDG. CL. LOOP

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
70-04 PUMP #11 DISCH. CHECK	3 A-6	C	12.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	CS-2	PE-Q(F) FE-Q(R) FE-C(F)	
70-05 PUMP #12 DISCH. CHECK	3 B-6	C	12.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	CS-2	PE-Q(F) FE-Q(R) FE-C(F)	
70-06 PUMP #13 DISCH. CHECK	3 C-6	C	12.00 CHV	SEA	DE	OC	-	FE-Q(F,R)	CS-2	PE-Q(F) FE-Q(R) FE-C(F)	
70-92 RBCLC RETURN FROM RX RECIRC PUMP COOLER HEADER	2 B-4	B	4.00 GTV	MOA	O	C	-	FE-Q ST-Q(C) PI-R	CS-3	FE-C ST-C(C) PI-R	
70-93 RECIRC PUMP MOTOR COOLER I.V.	2 C-4	C	4.00 CHV	SEA	DE	C	-	FE-Q(R)	RR-2	FE-R(R)	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18022-C,SH. 2
System : R. BLDG. CL. LOOP

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
70-94 RBCLC RETURN FROM DW AIR COOLERS	2 C-4	B	8.00 GTV	MOA	O	C	-	FE-Q ST-Q(C) PI-R	CS-1	FE-C ST-C(C) PI-R	
70-95 RBCLC DW AIR COOLER SUPPLY IV	2 E-3	C	8.00 CHV	SEA	DE	C	-	FE-Q(R)	RR-2	FE-R(R)	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18041-C,SH. 7
System : R. BLDG. CL. LOOP

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
70-272 PASS SAMPLE COOLER RETURN CHECK VALVE	3 F-5	C	0.75 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
70-274 PASS SAMPLE COOLER SUPPLY CHECK VALVE	3 F-6	C	0.75 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18047-C
System : R. BLDG. CL. LOOP

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
70-25 CLC TO CR CHILLER 11	3 G-1	B	4.00 PGV	APA	DE	O	O	FE-Q ST-Q(O) FS-Q(O)		FE-Q ST-Q(O) FS-Q(O)	
70-26 CLC TO CR CHILLER 12	3 E-1	B	4.00 PGV	APA	DE	O	O	FE-Q ST-Q(O) FS-Q(O)		FE-Q ST-Q(O) FS-Q(O)	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-26939-C
System : R. BLDG. CL. LOOP

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
70-218 H202 #12 SAMPLE COOLER SUPPLY CHECK VALVE	3 D-4	C	0.50 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
70-219 H202 #12 SAMPLE COOLER RETURN CHECK VALVE	3 D-3	C	0.50 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
70-234 H202 #12 CABINET COOLER SUPPLY CHECK VALVE	3 D-4	C	0.50 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-26949-C
System : R. BLDG. CL. LOOP

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
70-208 H202 #11 SAMPLE COOLER RETURN,CHECK VALVE	3 D-3	C	0.50 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
70-209 H202 #11 SAMPLE COOLER SUPPLY CHECK VALVE	3 D-4	C	0.50 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
70-229 H202 #11 CABINET COOLER SUPPLY CHECK VALVE	3 D-4	C	0.50 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	

COLD SHUTDOWN TEST JUSTIFICATION

RBCLCW-CS-1

System	:	RBCLCW
Valve	:	70-94
Category	:	A
Class	:	2
Function	:	Outlet Blocking Valve for Drywell Air Coolers Coolers.
ASME Section XI Quarterly Test Requirements	:	Exercise IWV-3412 and time IWV-3413 quarterly IWV-3411.
Cold Shutdown Test Justification	:	Testing this valve during normal operation requires interruption of the cooling water to the drywell air coolers. Loss of these coolers could result in a reactor scram due to higher drywell temperature causing higher drywell pressure.
Quarterly Part Stroke Testing	:	None
Cold Shutdown Testing	:	Exercise and time during cold shutdowns when interruption of cooling water to the drywell air coolers does not pose any operational concerns.

COLD SHUTDOWN TEST JUSTIFICATION

RBCLCW-CS-2

System	:	RBCLCW
Valves	:	70-04, 70-05, 70-06
Category	:	C
Class	:	3
Function	:	Pump Discharge Check Valves
ASME Section XI Quarterly Test Requirements	:	verify forward flow opening
Cold Shutdown Test Justification	:	Due to system heat loads, in most cases it is not possible to operate the system to achieve Code test conditions without adversely affecting plant operation. Two RBCLCW pumps are running during operations due to system demand. The system flowmeter is in the common header. With two pumps running, it is not possible to identify the flow that each pump is providing. During cold shutdowns, each pump will be tested one at a time. This will provide a flowrate which can be used to individually verify forward flow opening of each pump's discharge check valve.
Quarterly Part Stroke Testing	:	Forward flow operability shall be assessed during normal system operation.
Cold Shutdown Testing	:	Forward flow operability shall be verified during cold shutdowns when the Reactor Building Closed Loop Cooling Water Pumps are tested individually. This test is impractical to perform during quarterly intervals.

COLD SHUTDOWN TEST JUSTIFICATION

RBCLCW-CS-3

System	:	RBCLCW
Valve	:	70-92
Category	:	A
Class	:	2
Function	:	Outlet Blocking Valve for Recirculation Pump Coolers
ASME Section XI Quarterly Test Requirements	:	exercise IWV-3412 and time IWV-3413 quarterly IWV-3411
Cold Shutdown Test Justification	:	To test this valve would require interruption of cooling water to the recirculation pump coolers. Loss of cooling water for more than a few minutes could cause damage to the recirculation pumps. Failure of these valves to reopen could cause extensive damage to the equipment being cooled. Since the recirculation pumps would be tripped or secured prior to the stroking of 70-92, resulting in plant trip or shutdown. This testing is not practical during power operations.
Cold Shutdown Testing	:	exercise and time during cold shutdown intervals

RELIEF REQUEST

RBCLCW-RR-2

System	:	RBCLCW
Valves	:	70-93, 70-95
Category	:	C
Class	:	2
Function	:	provide RBCLCW to the Drywell Air Coolers and Reactor Recirculation Pump Motor Coolers
ASME Section XI Quarterly Test Requirements	:	verify reverse flow closure IWV-3522 quarterly IWV-3521
Basis for Relief	:	Testing these valves during normal operation or cold shutdown requires interruption of the cooling water to the drywell air coolers and reactor recirculation pump motor coolers for a long time period. Loss of the drywell air coolers could result in a reactor scram due to higher drywell temperature causing higher drywell pressure. Loss of cooling water to the recirculation pump water coolers for more than a few minutes could cause damage to the recirculation pumps. Testing the reactor recirculation pump motor cooler valve during cold shutdowns would also require intrusion into the system in order to verify reverse flow closure. Testing during these periods is not feasible as the reactor building closed loop cooling is a common line for the reactor recirculation pumps.

The test provisions are inside the drywell which is inaccessible during power operations due to the inerted atmosphere, the increased temperature/radiation levels for test personnel, etc.. Thus, it is impractical to test these valves during quarterly or cold shutdown intervals.

Relief Request RBCLCW-RR-2 Cont'd.

Alternate Testing : Reverse flow closure of these valves shall be verified at scheduled refueling outages.

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18048-C
System : CONDENSATE TRANS.

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
57-13 COND. TRANSFER SYST. PUMP #12 DISCHARGE	3 E-5	C	4.00 CHV	SEA	DE	OC	-	FE-Q(F,R)		FE-Q(F,R)	
57-136 COND. TRANSFER SYSTEM PUMP #11 MIN. FLOW TO CST (CT-9)	3 F-5	C	0.75 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
57-14 COND. TRANSFER SYST. PUMP #11 DISCHARGE	3 F-5	C	4.00 CHV	SEA	DE	OC	-	FE-Q(F,R)		FE-Q(F,R)	
57-142 COND. TRANSFER SYSTEM PUMP #12 MIN. FLOW TO CST (CT-10)	3 F-5	C	0.75 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	
57-57 COND. TRANSFER SYS. SAFETY VALVE SRG/STRG TANK	3 B-5	C	3 X 4 REV	SEA	DE	O	-	RT-P		RT-P	NOTE 1

NOTES FOR CONDENSATE TRANSFER SYSTEM VALVE TABLE

1. Per Q-List, the valve is safety-related passive; the test is to satisfy INPO SER 26-88.

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18006-C,SH. 2
System : TORUS VAC. RELIEF

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
68-01 TORUS TO DRYWELL VACUUM RELIEF CHECK	2 D-3	C	30.00 CHV	SEA APA	C	OC	-	FE-Q(F,R) PI-R		FE-Q(F,R) PI-R	NOTE 1
68-02 TORUS TO DRYWELL VACUUM RELIEF CHECK	2 E-3	C	30.00 CHV	SEA APA	C	OC	-	FE-Q(F,R) PI-R		FE-Q(F,R) PI-R	NOTE 1
68-03 TORUS TO DRYWELL VACUUM RELIEF CHECK	2 E-3	C	30.00 CHV	SEA APA	C	OC	-	FE-Q(F,R) PI-R		FE-Q(F,R) PI-R	NOTE 1
68-04 TORUS TO DRYWELL VACUUM RELIEF CHECK	2 E-3	C	30.00 CHV	SEA APA	C	OC	-	FE-Q(F,R) PI-R		FE-Q(F,R) PI-R	NOTE 1
68-05 REACTOR BUILDING TO TORUS VACUUM RELIEF I.V.	2 F-2	A,C	30.00 CHV	SEA APA	C	OC	-	FE-Q(F,R) PI-R LJ-R		FE-Q(F,R) PI-R LJ-R	NOTE 1

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18006-C,SH. 2
System : TORUS VAC. RELIEF

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
68-06 REACTOR BUILDING TO TORUS VACUUM RELIEF I.V.	2 F-2	A,C	30.00 CHV	SEA APA	C	OC	-	FE-Q(F,R) PI-R LJ-R		FE-Q(F,R) PI-R LJ-R	NOTE 1
68-07 REACTOR BUILDING TO TORUS VACUUM RELIEF I.V.	2 F-2	A,C	30.00 CHV	SEA APA	C	OC	-	FE-Q(F,R) PI-R LJ-R		FE-Q(F,R) PI-R LJ-R	NOTE 1
68-08 REACTOR BUILDING TO TORUS VACUUM RELIEF I.V.	2 F-2	A	30.00 BFV	APA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(O) LJ-R PI-R	
68-09 REACTOR BUILDING TO TORUS VACUUM RELIEF I.V.	2 F-2	A	30.00 BFV	APA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(O) LJ-R PI-R	
68-10 REACTOR BUILDING TO TORUS VACUUM RELIEF I.V.	2 F-2	A	30.00 BFV	APA	C	OC	O	FE-Q ST-Q(O,C) FS-Q(O) LJ-R PI-R		FE-Q ST-Q(O,C) FS-Q(O) LJ-R PI-R	

NOTES FOR TORUS VACUUM RELIEF SYSTEM VALVE TABLE

1. opening force measured using torque wrench

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18022-C,SH. 1
System : EMERG. SVC. WATER

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
72-11 EMERG. S.W. PUMP #12 DISCH. CHECK	3 C-5	C	14.00 CHV	MAA SEA	DE	O	-	FE-Q(F)	RR-1	FE-R(F)	
72-12 EMERG. S.W. PUMP #11 DISCH. CHECK	3 D-5	C	14.00 CHV	MAA SEA	DE	O	-	FE-Q(F)	RR-1	FE-R(F)	
72-21 SERVICE WATER SUPPLY CHECK	3 D-2	C	20.00 CHV	MAA SEA	DE	C	-	FE-Q(R)	CS-1	FE-C(R)	
72-22 SERVICE WATER SUPPLY CHECK	3 D-3	C	20.00 CHV	MAA SEA	DE	C	-	FE-Q(R)	CS-1	FE-C(R)	

Drawing No. : C-18027-C,SH. 2
System : EMERG. SVC. WATER

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
72-479 SERVICE WATER TO DRYWELL I.V. OUTSIDE (SW-121)	2 C-4	A	1.00 GTV	MAA	C	C	-	PV LJ-R		PV LJ-R	NOTE 1
72-480 SERVICE WATER TO DRYWELL I.V. INSIDE (SW-12)	2 C-4	A	1.00 GTV	MAA	C	C	-	PV LJ-R		PV LJ-R	NOTE 1

NOTES FOR EMERGENCY SERVICE WATER SYSTEM VALVE TABLE

1. The valve shall be locked closed by chain and lock and/or another approved method.

COLD SHUTDOWN JUSTIFICATION

ESW-CS-1

System	:	Emergency Service Water
Valves	:	72-21, 72-22
Category	:	C
Class	:	3
Function	:	Isolate reactor building service water supply from turbine building service water supply
ASME Section XI Quarterly Test Requirements	:	Verify reverse flow closure IWV-3522 quarterly IWV-3521
Cold Shutdown Test Justification	:	There is no method to simulate reverse flow closure of these valves due to the system design configuration. Also, both service water headers are operating during normal operation; thus, testing these valves during quarterly intervals is not practical. Reverse flow closure of these valves will be performed on a cold shutdown basis. One loop will be taken down and the pressure from the running loop will be used to verify reverse closure on these check valves. Position (arm rotation) will be used to verify reverse flow closure.
Cold Shutdown Testing	:	Verify reverse flow closure

RELIEF REQUEST

ESW-RR-1

System	:	Emergency Service Water
Valves	:	72-11, 72-12
Category	:	C
Class	:	3
Function	:	Emergency Service Water Pump Discharge Check Valves
ASME Section XI Quarterly Test REquirements	:	Verify forward flow opening IWV-3522 quarterly IWV-3521
Basis for Relief	:	The emergency service water pumps are normally in standby during all modes of plant operation. Since the regular service water system is in service or the headers are pressurized during all modes of plant operation, including cold shutdown, and since normal service water pressure is above the shutoff pressure of the emergency service water pumps, no flow path exists for flow through these check valves without removing the normal service water system from service. Use of the lever arm is not possible due to the service water pressure on the downstream side of these check valves at all times. (Since the service water system is a raw water system, and the ESW lines are stagnant during normal operation, it is difficult to maintain the adjacent manual blocking valve leak-tight enough to isolate service water pressure.) The test loop provided for pump testing is also upstream from the check valve. Testing at quarterly or at cold shutdown intervals is impractical due to the adverse impact of isolating equipment heat loads from their cooling water supply and since the higher normal service water pressure keeps these valves closed.

Relief Request ESW-RR-1 Cont'd.

Alternate Testing : A modification shall be evaluated to permit quarterly exercising of these valves. This modification shall be performed next refueling outage (1993). Forward flow opening at quarterly intervals will be performed and the torque measured. Forward flow opening, using the flow device at refueling intervals, will be performed.

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18026-C,SH. 1
System : EM. DSL. WTR. CL.

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
79-59 EM. DGCW PUMP #102 DISCH. CHECK	3 B-5	C	4.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-1	PE-Q(F) FE-R(F)	NOTE 1
79-61 #102 DIESEL COOLING WATER LOOP DISCHARGE CHECK	3 C-5	C	4.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-1	PE-Q(F) FE-R(F)	NOTE 1

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18026-C,SH. 2
System : EM. DSL. WTR. CL.

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
79-60 EM. DGCW PUMP #103 DISCH. CHECK	3 B-5	C	4.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-1	PE-Q(F) FE-R(F)	NOTE 1
79-62 #103 DIESEL COOLING WATER LOOP DISCHARGE CHECK	3 C-5	C	4.00 CHV	SEA	DE	O	-	FE-Q(F)	RR-1	PE-Q(F) FE-R(F)	NOTE 1

NOTES FOR EMERGENCY DIESEL GENERATOR COOLING WATER SYSTEM VALVE TABLE

1. Non-intrusive testing performed on these valves as outlined in Relief Request EDGCW-RR-1 satisfies the intent of IE Bulletin 83-03. This testing, therefore, supercedes previous commitments identified in the below-referenced letters.*

* Reference NMPS1 letters, dated 6/14/83 (Log NMP6777) and 12/10/84 (Log NMP7947)

RELIEF REQUEST
EDGCW-RR-1

System	:	Emergency Diesel Generator Cooling Water
Valves	:	79-59, 79-60, 79-61, 79-62
Category	:	C
Class	:	3
Function	:	Emergency Diesel Generator Cooling Water (EDGCW) Pump Discharge Check Valves
ASME Section XI Quarterly Test Requirements	:	Verify full-stroke opening per IWV-3521 and IWV-3522
Basis for Relief	:	Based on an Engineering Evaluation and Calculation, the required design flow of the EDGCW system has increased from 240 gpm to 296 gpm. Accordingly, the design flow of the pump discharge and heat exchanger discharge check valves has also increased. These valves are currently tested quarterly during the surveillance test of the diesel generator.

As indicated above, the design flow of the EDGCW system is 296. However, during normal plant operation, the EDGCW system flow is limited to approximately 250 gpm. Flow is limited due to the effect of service water system back pressure on the EDGCW system. (Note - when the diesels are required to be operable, service water back pressure decreases allowing EDGCW system design flow to be reached). Therefore, using design flow to verify full-stroke opening during normal plant operation is not practical.

The only available method to verify full-stroke opening is to utilize a non-intrusive method. Non-intrusive testing requires considerable time for equipment set up as well as data acquisition. The frequency of performing non-intrusive testing is recommended to be once per refueling outage (every two years) for each valve.

RELIEF REQUEST EDGCW-RR-1 (Cont'd.)

Alternate Testing : A. Quarterly partial flow testing is performed at substantial flow (approximately 250 gpm) and is expected to exercise the valve disk to the full open position. The quarterly partial flow test combined with the reverse flow test should provide reasonable assurance that the valves are operating properly.

B. Non-intrusive testing is performed once per refueling (two years) at substantial flow (approximately 250 gpm) to verify full-stroke opening. The non-intrusive testing method is in compliance with the NRC staff position stipulated in GL 89-04, Position 1. Non-intrusive testing is expected to provide additional information about a check valve's overall condition above that obtained through flow testing. This testing will provide an added measure of the operational readiness of these valves.

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18026-C,SH. 1
System : EM. DSL. AIR COOL

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
96-11 D.G. 102 COMPRESSOR STOP CHECK VALVE	N E-1	A,C	0.75 SCV	SEA	DE	OC	-	FE-Q(F,R)		FE-Q(F,R)	NOTE 1
96-12 D.G. 102 COMPRESSOR STOP CHECK VALVE	N E-2	A,C	0.75 SCV	SEA	DE	OC	-	FE-Q(F,R)		FE-Q(F,R)	NOTE 1
96-15 D.G. 102 AIR TK. #1PSV	N F-1	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1
96-16 D.G. 102 AIR TK. #2PSV	N G-1	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1
96-17 D.G. 102 AIR TK. #3PSV	N G-1	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1

Drawing No. : C-18026-C,SH. 1
System : EM. DSL. AIR COOL

NMP1-IST-001, Rev. 3
October 1992

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
96-18 D.G. 102 AIR TK. #4PSV	N H-1	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1
96-19 D.G. 102 AIR TK. #5PSV	N H-1	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1
96-20 D.G. 102 AIR START PSV	N G-3	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1
96-85 RELAY VALVE DG102	N E-3	B	1.50 GTV	ADA	DE	OC	-	FE-Q ST-Q(O,C)		FE-Q ST-Q(O,C)	NOTES 1,2
96-86 PINION DRIVES DG 102	N F-3	B	0.375 TWV	SOA	DE	OC	C	FE-Q ST-Q(O,C) FS-Q(C)		FE-Q ST-Q(O,C) FS-Q(C)	NOTES 1,2

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18026-C,SH. 2
System : EM. DSL. AIR COOL

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
96-107 RELAY VALVE DG 103 DRIVES	N E-3	B	1.50 GTV	ADA	DE	OC	-	FE-Q ST-Q(O,C)		FE-Q ST-Q(O,C)	NOTES 1,2
96-108 PINION DRIVES DG 103	N F-3	B	0.375 TWV	SOA	DE	OC	C	FE-Q ST-Q(O,C) FS-Q(C)		FE-Q ST-Q(O,C) FS-Q(C)	NOTES 1,2
96-38 DG103 COMPRESSOR STOP CHECK VALVE	N E-1	A,C	0.75 SCV	SEA	DE	OC	-	FE-Q(F,R)		FE-Q(F,R)	NOTE 1
96-39 DG103 COMPRESSOR STOP CHECK VALVE	N E-2	A,C	0.75 SCV	SEA	DE	OC	-	FE-Q(F,R)		FE-Q(F,R)	NOTE 1
96-44 DG103 AIR TANK #1 PSV	N F-1	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1

Drawing No. : C-18026-C,SH. 2
System : EM. DSL. AIR COOL

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
96-45 DG103 AIR TANK #2 PSV	N G-1	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1
96-46 DG103 AIR TANK #3 PSV	N G-1	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1
96-47 DG103 AIR TANK #4 PSV	N H-1	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1
96-48 DG103 AIR TANK #5 PSV	N H-1	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1
96-49 DG103 AIR START PSV	N G-3	C	0.50 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1

NOTES FOR EMERGENCY DIESEL GENERATOR AIR START SYSTEM VALVE TABLE

1. The Emergency Diesel Generator Air Start System is non-ASME Code classed, per Reg. Guide 1.26. This System performs a safety-related function and the appropriate valves are in the IST Program and are tested to their safety function.

2. These valves are skid-mounted components and are interlocked with the emergency diesel generator operation. Failure of these valves to open would be readily indicated by failure of the diesel to start.

   Technical specification emergency diesel generator monthly start and operability tests are performed for a minimum time of one hour. These valves shall be verified operable when the Emergency Diesel Generator monthly Tech. Spec. start and load tests are performed.

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18026-C,SH. 1,2
System : E. DSL. FUEL TRAN

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
82-86 EDG STORAGE TANK 102 FOOT VALVE	N C-3	C	1.50 CHV	SEA	C	OC	-	FE-Q(F,R)		FE-Q(F,R)	NOTES 1,2
82-87 EDG STORAGE TANK 103 FOOT VALVE	N B-3	C	1.50 CHV	SEA	C	OC	-	FE-Q(F,R)		FE-Q(F,R)	NOTES 1,2

NOTES FOR EMERGENCY DIESEL GENERATOR FUEL OIL TRANSFER SYSTEM

1. The Emergency Diesel Generator Fuel Oil Transfer System is non-ASME Code classed, per Reg. Guide 1.26. The system performs a safetyrelated function and the appropriate valves are in the IST Program, and are tested to their safety function.

2. Test requirements are to verify forward flow opening and reverse flow closure.

   The Diesel Fuel Oil Storage Tank foot valves are submerged inside the Diesel Fuel Oil Storage Tanks and, thus, are inaccessible.

   Technical Specification Emergency Diesel Generator monthly start and operability tests are performed for a minimum time of one hour. Since the Diesel Fuel Oil Day Tanks are filled during the Emergency Diesel Generator operability test, these valves are verified operable when the tanks are filled.

Drawing No. : C-18045-C,SH. 7
System : WASTE DISPOSAL

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
83.1-09 DRYWELL EQUIP. DRAIN I.V.	2 D-1	A	3.00 GTV	MOA	O	C	-	FE-Q ST-Q(C) LJ-R PI-R		FE-Q ST-Q(C) LJ-R PI-R	
83.1-10 DRYWELL EQUIP. DRAIN I.V.	2 H-2	A	3.00 GLV	ADA	O	C	C	FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18045-C,SH. 9
System : WASTE DISPOSAL

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
83.1-11 DRYWELL FLOOR DRAIN I.V.	2 H-1	A	4.00 GTV	MOA	O	C	-	FE-Q ST-Q(C) LJ-R(C) PI-R		FE-Q ST-Q(C) LJ-R PI-R	
83.1-12 DRYWELL FLOOR DRAIN I.V.	2 G-1	A	4.00 GLV	ADA	O	C	C	FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R		FE-Q ST-Q(C) FS-Q(C) LJ-R PI-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18578-C
System : BREATHING AIR

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
114-114 BREATHING AIR SUPPLY TO DRYWELL EL. 237' (114-BA-102)	2 E-3	A	4.00 GLV	MAA	C	C	-	PV LJ-R		PV LJ-R	
114-115 BREATHING AIR SUPPLY DRYWELL EL. 237' (114-BA-103)	2 E-3	A	4.00 GLV	MAA	C	C	-	PV LJ-R		PV LJ-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18047-C
System : CR CHILLED WATER

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
210.1-01 COOL. CL. #11 INLET BLOCKING VALVE	3 E-3	B	3.00 PGV	APA	DE	O	O	FE-Q ST-Q(O) FS-Q(O)		FE-Q ST-Q(O) FS-Q(O)	
210.1-02 COOL. CL. #12 INLET BLOCKING VALVE	3 E-3	B	3.00 PGV	APA	DE	O	O	FE-Q ST-Q(O) FS-Q(O)		FE-Q ST-Q(O) FS-Q(O)	
210.1-34 CIRC. PUMP #11 DISCHARGE CV	3 F-2	C	2.50 CHV	SEA	O	OC	-	FE-Q(F,R)		FE-Q(F,R)	
210.1-35 CIRC. PUMP #12 DISCHARGE CV	3 F-2	C	2.50 CHV	SEA	O	OC	-	FE-Q(F,R)		FE-Q(F,R)	
210.1-56 (MO-1) CHILL WATER RTN FCV	3 D-4	B	2.50 TWV	MOA	DE	O	O	FE-Q ST-Q(O) FS-Q(O)		FE-Q ST-Q(O) FS-Q(O)	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18047-C
System : CR HT VNT AIR CL

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
210-08 C.R. NORMAL VENT. FAN SUCT.	3 B-3	B	14.00 BFV	APA	O	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	
210-39 C.R. NORMAL VENT. FAN SUCT.	3 B-3	B	12.00 BFV	APA	O	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18011-C,SH. 2
System : INSTRUMENT AIR

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
114-15 B.A. SYSTEM CHECK VALVE	N E-2	C	3.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	NOTE 1
94-05C AFTERCOOLER #3 R.V.	N D-2	C	0.75 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1
94-06C AFTERCOOLER #4 R.V.	N D-4	C	0.75 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1
94-45 INTERCOOLER #3 R.V.	N B-2	C	0.75 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1
94-47 INTERCOOLER #4 R.V.	N B-3	C	0.75 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18011-C,SH. 2
System : INSTRUMENT AIR

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
94-51 I.A. RECEIVER #11 OUTLET CHECK VALVE	N E-1	C	3.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	NOTE 1
94-91 C.S. AIR RECEIVER B.V.	N E-2	B	4.00 TPV	APA	C	C	C	FE-Q ST-Q(C) FS-Q(C) PI-R		FE-Q ST-Q(C) FS-Q(C) PI-R	NOTE 1

SECOND TEN YEAR INTERVAL
NINE MILE POINT NUCLEAR STATION - UNIT 1
NMP1-IST-001, Rev. 3
October 1992

Drawing No. : C-18030-C,SH. 3
System : INSTRUMENT AIR

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
100-921 D.F.P. AIR RECEIVER #11 R.V.	N I-2	C	0.75 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1
100-922 D.F.P. AIR RECEIVER #12 R.V.	N J-2	C	0.75 REV	SEA	C	O	-	RT-P		RT-P	NOTE 1
100-923 D.F.P. AIR START VALVE	N I-1	B	1.00 GTV	SOA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C)		FE-Q ST-Q(O,C) FS(C)	NOTES 1,2
100-924 D.F.P. AIR START VALVE	N J-1	B	1.00 GTV	SOA	C	OC	C	FE-Q ST-Q(O,C) FS-Q(C)		FE-Q ST-Q(O,C) FS-Q(C)	NOTES 1,2
IA-218 D.F.P. AIR RECEIVER #12 R.V.	N K-2	C	1.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	NOTE 1

Drawing No. : C-18030-C,SH. 3
System : INSTRUMENT AIR

REPORT DATE: 10/12/92

VALVE NO	CLASS & COORD.	VALVE CAT.	SIZE (IN) & TYPE	ACTU TYPE	POSITION NRM	POSITION SAF	POSITION FAL	ASME SEC.XI TST/FREQ/DIR	RELIEF REQ C.S. JUST.	IST PRGM PLN COMMITMENT TST/FREQ/DIR	REMARKS
IA-219 D.F.P. AIR RECEIVER #11 INLET CHECK VALVE	N H-2	C	1.00 CHV	SEA	DE	O	-	FE-Q(F)		FE-Q(F)	NOTE 1

NOTES FOR INSTRUMENT AIR SYSTEM VALVE TABLE

NOTES : 1. The Instrument Air System is non-ASME Code classed, per Reg. Guide 1.26. This system performs a safety-related function and the appropriate valves are in the IST Program and are tested in accordance to their safety function.

2. These valves are skid-mounted components and are interlocked with the Diesel Fire Pump operation. These valves are in parallel and discharge to the Diesel Fire Pump via a common discharge manifold. There are no provisions for determining valve position. Failure of these valves to open would be readily indicated by failure of the Diesel Fire Pump to start.

These valves shall be individually verified operable on a quarterly basis via the ability of the Diesel Fire Pump to start.

NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT NUCLEAR STATION UNIT 1

APPENDIX "A"

Pump and Valve Inservice Testing Program Plan
Exclusion/Justification Document

TABLE OF CONTENTS

SECTION I - OVERVIEW

SECTION II - COMPONENT EXCLUSION/JUSTIFICATION

Table of Contents (Cont'd.)

*   Systems which have no excluded safety-related components

APPENDIX A

PUMP AND VALVE INSERVICE TESTING PROGRAM PLAN
EXCLUSION/JUSTIFICATION DOCUMENT
FOR NINE MILE POINT NUCLEAR POWER STATION UNIT 1

SECTION I - OVERVIEW

1.0 INTRODUCTION

This document presents justification for excluding various safety-related pumps and valves from the 2nd Interval Inservice Testing (IST) Program Plan at Nine Mile Point Unit 1 (NMP1). This Appendix is to be revised in parallel with the IST Program Plan (NMP1-IST-001).

2.0 BASIS

The basis for the selection of pumps and valves that are included in the Second Ten Year Interval Pump and Valve Inservice Test Program (NMP-IST-001) Plan is described in Section I-2.0 of that document.

Safety-related pumps and valves not included in the IST Program Plan, or pumps and valves that have been removed from the IST Program Plan, are included in this document. Also included is the justification for the exclusion of the component.

3.0 DEFINITIONS

The terms below, when used in the Inservice Testing Program Plan, Exclusion/Justification Document, are defined as follows:

Q-List : The document describing systems, structures, and components to which the program elements of 10CFR50, Appendix B apply:

A. Applicability of the regulation is limited to safety-related items;

B. Application of the regulatory program elements may be extended by utility management mandate to non-safety-related items considered important enough to be controlled under the Appendix B Quality Assurance Program.

Q-Boundary Drawings : Controlled drawings which delineate the boundaries of Q-List Systems and associated components

Active : any valve which is required to change position to accomplish its safety-related function

Passive : any valve which is not required to change position to accomplish its safety-related function

APPENDIX A

PUMP AND VALVE INSERVICE TESTING PROGRAM PLAN
EXCLUSION/JUSTIFICATION DOCUMENT
FOR NINE MILE POINT NUCLEAR STATION UNIT 1

SECTION II
COMPONENT EXCLUSION/JUSTIFICATION

1.0 INTRODUCTION

Safety related pumps and valves not included in the IST Program Plan or pumps and valves that have been removed from the IST Program Plan are included in this document. Also included is the justification for the exclusion of the component.

2.0 CODE INTERPRETATION

The Asme XI Code has two general conditions which must be met for pumps to be included in the IST Program Plan. The safety related centrifugal or displacement type pumps must perform a specific function in shutting down the reactor or in mitigating the consequences of an accident, and must be provided with an emergency on site power source.

The ASME XI Code has two general conditions which must be met for valves to be included in the IST Program Plan. The safety related valves must perform a specific function in shutting down a reactor to the cold shutdown condition or in mitigating the consequences of an accident.

Control valves that do not have required fail safe positions (i.e., credit not taken in safety analysis for the valve failing to a specified position) are exempted from Section XI by IWV-1200. However, if credit is taken for the fail-safe function of a control valve, it is an active valve that must be tested to all of the applicable requirements of IWV-3400 and not just to the requirements of IWV-3415.

2.1 PUMPS

Pumps which are excluded from the IST Program Plan include those pumps which meet the conditions of 2.1.1 or 2.1.2:

2.1.1 the pump does not have an emergency on-site power supply (IWP-1100);

2.1.2 the pump is supplied with emergency power solely for operating convenience (IWP-1200(b)0.

2.1.3 pumps for which the fluid medium is air or some other gas are excluded as these components are considered fans.

2.2 VALVES

Valves which are excluded from the IST Program Plan include the following:

2.2.1 valves used only for operating convenience, such as manual vent, drain, instrument, and test valves (IWV-1200(a)); these valves are not listed in this document;

2.2.2 valves used for system control, such as self-contained pressure-regulating valves (IWV-1200(a));

2.2.3 valves used for maintenance (IWV-1200(a));

2.2.4 external control and protection systems responsible for sensing plant conditions and providing signals for valve operation (IWV-1200(b)); these valves are not listed in this document;

3.0 COMPONENT EXCLUSION/JUSTIFICATION TABLES

This section includes the attachments for systems which have safety-related pumps and valves. Valves exempted by IWV-1200(a), which are listed in the attached Tables, include valves used for system control and maintenance convenience. Other components in the attached Tables include skid-mounted valves which are integral to main components, passive safety-related valves as defined in NMP1 Q-List, engineering analysis excluded valves, and HVAC system dampers. Three non-safety-related systems are addressed in this section: Feedwater System, Shutdown Cooling System, and Control Rod Drive System. These three systems are not credited in the NMP1 Accident Analysis. Portions of these systems are classified as safety-related and are identified as Class 1, 2, or 3 on the Q-Boundary drawings. Pumps and valves in these systems, which have ASME XI requirements, are included in the IST Program Plan; all other components are excluded as non-safety-related.

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: MAIN STEAM
DWG.NO: C-18002-C,SH.1

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
01-03 MS-OUT IV #3 (112)	1 A-4	A	24.00 GLV	APA	O	DELETED ONE OF TWO FAIL/SAFE TESTS ("SPRINGS ONLY") AS INSTRUMENT AIR IS SAFETY-RELATED
01-04 MS-OUT IV #4 (122)	1 E-4	A	24.00 GLV	APA	O	DELETED ONE OF TWO FAIL/SAFE TESTS ("SPRINGS ONLY") AS INSTRUMENT AIR IS SAFETY-RELATED
34-01 & 02 CRD HEAD SPRAY	1 D/E-1	C	2.00 CHV	SEA	C	THIS LINE IS CUT/CAPPED AND RETIRED. THESE VALVES NO LONGER PERFORM ANY SAFETY-RELATED FUNCTION AND ARE NO LONGER INCLUDED IN APPENDIX J LEAKAGE TESTING PROGRAM.

SYSTEM: MAIN STEAM
DWG.NO: C-18002-C,SH.1

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
66-37 VACUUM BREAKER (CS-C-4)	2 B-2	C	1.00 CHV	SEA	DE	THIS VALVE IS NOT REQUIRED PER TELEDYNE ENGINEERING ANALYSIS.
66-38 VACUUM BREAKER (CS-C-4)	2 B-2	C	1.00 CHV	SEA	DE	THIS VALVE IS NOT REQUIRED PER TELEDYNE ENGINEERING ANALYSIS.
66-39 VACUUM BREAKER (CS-C-4)	2 B-3	C	1.00 CHV	SEA	DE	THIS VALVE IS NOT REQUIRED PER TELEDYNE ENGINEERING ANALYSIS.

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: MAIN STEAM
DWG.NO: C-18002-C,SH.1

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
66-40 VACUUM BREAKER (CS-C-4)	2 D-2	C	1.00 CHV	SEA	DE	THIS VALVE IS NOT REQUIRED PER TELEDYNE ENGINEERING ANALYSIS.
66-41 VACUUM BREAKER (CS-C-4)	2 D-3	C	1.00 CHV	SEA	DE	THIS VALVE IS NOT REQUIRED PER TELEDYNE ENGINEERING ANALYSIS.
66-42 VACUUM BREAKER (CS-C-4)	2 D-3	C	1.00 CHV	SEA	DE	THIS VALVE IS NOT REQUIRED PER TELEDYNE ENGINEERING ANALYSIS.

SYSTEM: MAIN STEAM
DWG.NO: C-18015-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
36-83 (IA26) H.P. SEAL LEAK DET. B.V.	1 E-2	B	1.00 GTV	SOA	O	COMPONENT DELETED FROM IST PROGRAM PLAN AS NON-SAFETY-RELATED. SEE APPENDIX B DETERMINATION NO. 88-83. ALSO, SEE GE SIL NO. 42 AND NI-OP-1, PROCEDURE FOR CORRECTING ALARM CONDITIONS WHICH TREAT AS PASSIVE.
36-86 (IA25) H.P. SEAL LEAK DET. B.V.	1 F-2	B	1.00 GTV	SOA	O	COMPONENT DELETED FROM IST PROGRAM PLAN AS NON-SAFETY-RELATED. SEE APPENDIX B DETERMINATION NO. 88-83. ALSO, SEE GE SIL NO. 42 AND NI-OP-1, PROCEDURE FOR CORRECTING ALARM CONDITIONS WHICH TREAT AS PASSIVE.

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: REACTOR RECIRC.
DWG.NO: C-18020-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
32-187 REACTOR RECIRC PUMP (NG01A)	1 E-4	NA	NA NA	NA	NA	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
32-188 REACTOR RECIRC PUMP (NG01B)	1 E-4	NA	NA NA	NA	NA	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
32-189 REACTOR RECIRC PUMP (NG01C)	1 E-4	NA	NA NA	NA	NA	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: REACTOR RECIRC.
DWG.NO: C-18020-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
32-190 REACTOR RECIRC PUMP (NG01D)	1 E-4	NA	NA NA	NA	NA	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
32-191 REACTOR RECIRC PUMP (NG01E)	1 E-4	NA	NA NA	NA	NA	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
32-375 PUMP SUCTION ISOL. (NG02A)	1 E-5	B	28.00 GTV	MOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: REACTOR RECIRC.
DWG.NO: C-18020-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
32-376 PUMP SUCTION ISOL. (NG02B)	1 E-5	B	28.00 GTV	MOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
32-377 PUMP SUCTION ISOL. (NG02C)	1 E-5	B	28.00 GTV	MOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
32-378 PUMP SUCTION ISOL. (NG02D)	1 E-5	B	28.00 GTV	MOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: REACTOR RECIRC.
DWG.NO: C-18020-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
32-379 PUMP SUCTION ISOL. (NG02E)	1 E-5	B	28.00 GTV	MOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
32-380 PUMP DISCHARGE ISOL. (NG03A)	1 D-4	B	28.00 GTV	MOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
32-381 PUMP DISCHARGE ISOL. (NG03B)	1 D-4	B	28.00 GTV	MOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: REACTOR RECIRC.
DWG.NO: C-18020-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
32-381 PUMP DISCHARGE ISOL. (NG03C)	1 D-4	B	28.00 GTV	MOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
32-383 PUMP DISCHARGE ISOL. (NG03D)	1 D-4	B	28.00 GTV	MOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
32-384 PUMP DISCHARGE ISOL. (NG03E)	1 D-4	B	28.00 GTV	MOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: REACTOR RECIRC.
DWG.NO: C-18020-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
32-388 PUMP BYPASS VALVE (NG08D)	1 D-4	B	2.00 GTV	MOA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
32-389 PUMP BYPASS VALVE (NG08E)	1 D-4	B	2.00 GTV	MOA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: REACTOR RECIRC.
DWG.NO: C-18020-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
32-385 PUMP BYPASS VALVE (NG08A)	1 D-4	B	2.00 GTV	MOA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
32-386 PUMP BYPASS VALVE (NG08B)	1 D-4	B	2.00 GTV	MOA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
32-387 PUMP BYPASS VALVE (NG08C)	1 D-4	B	2.00 GTV	MOA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: CRD
DWG.NO: C-18016-C,SH.1

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
28-15 CRD PUMPS 11 & 12	N A-6	Q	NA NA	NA	NA	THE CRD PUMPS AND ASSOC. SYSTEM PIPING AND COMPONENTS ARE NOT SAFETY-RELATED PER NMPS-1 "Q-LIST"AND "Q-BOUNDARY DRWGS". THE PUMPS ARE NOT REQUIRED TO ASSURE THE CAPABILITY TO SHUT DOWN THE REACTOROR TO MAINTAIN IT IN A SAFE SHUTDOWN CONDITION, NOR ARE THEY REQUIRED TO MITIGATE THE CONSEQUENCES OF AN ACCIDENT. THESE PUMPS ARE NOT CREDITED IN THE ACCIDENT ANALYSIS.
SO-120 CRD HYD. DRIVE ISOL. SOLENOID	N B-1	B	0.5 GTV	SOA	C	SAFETY RELATED PASSIVE PER NMP1 "Q-LIST".
SO-121 CRD HYD. DRIVE ISOL. SOLENOID	N A-1	B	0.5 GTV	SOA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: CRD
DWG.NO: C-18016-C,SH.1

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
SO-122 CRD HYD. DRIVE ISOL. SOLENOID	N A-1	B	0.5 GTV	SOA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
SO-123 CRD HYD. DRIVE ISOL. SOLENOID	N B-1	B	0.5 GTV	SOA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: FEEDWATER/HPCI
DWG.NO: C-18005-C,SH.1,2;C-18004-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
						SAFETY-RELATED VALVES IN THE FEEDWATER/HPCI SYSTEM ARE IN THE IST PROGRAM PLAN. THERE ARE NO EXCLUSIONS.

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: CORE SPRAY
DWG.NO: C-18007-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
40-20 1ST CHECK #11 KEEP-FILL	2 B-2	A,C	2.0 CHV	SEA	DE	THE OPEN FUNCTION IS NOT S/R PER Q LIST
40-21 2ND CHECK #11 KEEP-FILL	1 B-2	A,C	2.0 CHV	SEA	DE	THE OPEN FUNCTION IS NOT S/R PER Q LIST.
40-22 2ND CHECK #12 KEEP-FILL	1 G-2	A,C	2.0 CHV	SEA	DE	THE OPEN FUNCTION IS NOT S/R PER Q LIST.

SYSTEM: CORE SPRAY
DWG.NO: C-18007-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
40-23 1ST CHECK #12 KEEP-FILL	2 G-2	A,C	2.0 CHV	SEA	DE	THE OPEN FUNCTION IS NOT S/R PER Q LIST.
40-30 CORE SPRAY 11 HIGH POINT VENT VALVE IV	1 D-2	B	1.0 GLV	MOA	C	DELETED LJ-R APP. J PROGRAM CHANGE
40-31 CORE SPRAY 12 HIGH POINT VALVE IV	1 E-2	B	1.0 GLV	MOA	C	DELETED LJ-R APP. J PROGRAM CHANGE

SYSTEM: CORE SPRAY
DWG.NO: C-18007-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
40-32 CORE SPRAY 11 HIGH POINT IV	2 C-2	B	1.0 GLV	MOA	C	DELETED LJ-R APP. J PROGRAM CHANGE
40-33 CORE SPRAY 12 HIGH POINT VENT IV	2 F-2	B	1.0 GLV	MOA	C	DELETED LJ-R APP. J PROGRAM CHANGE
81-175 LOOP 111 C.S. TOPPING PUMP SEAL COOL & LUBE CHK VLV	2 G-1	C	0.5 CHV	SEA	DE	EXEMPT PER IWV-1200(A)

SYSTEM: CORE SPRAY
DWG.NO: C-18007-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
81-176 LOOP 112 C.S. TOPPING PUMP SEAL COOL & LUB. CHK VLV	2 G-1	C	0.5 CHV	SEA	DE	EXEMPT PER IWV-1200(A)
81-177 LOOP 121 C.S. TOPPING PUMP SEAL COOL & LUB. CHK VLV	2 G-1	C	0.5 CHV	SEA	DE	EXEMPT PER IWV-1200(A)
81-178 LOOP 122 C.S. TOPPING PUMP SEAL COOL & LUB. CHK VLV	2 G-1	C	0.5 CHV	SEA	DE	EXEMPT PER IWV-1200(A)

SYSTEM: CORE SPRAY
DWG.NO: C-18007-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
81-183 LOOP 111 C.S. TOPPING PUMP SEAL COOL & LUBE CHK VLV	2 H-1	C	0.75 CHV	SEA	DE	EXEMPT PER IWV-1200(A)
81-184 LOOP 112 C.S. TOPPING PUMP SEAL COOL & LUBE CHK VLV	2 H-1	C	0.75 CHV	SEA	DE	EXEMPT PER IWV-1200(A)
81-185 LOOP 121 C.S. TOPPING PUMP,SEAL,COOL & LUBE CHK VLV	2 H-1	C	0.75 CHV	SEA	DE	EXEMPT PER IWV-1200(A)

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: CORE SPRAY
DWG.NO: C-18007-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
81-186 LOOP 122 C.S. TOPPING PUMP SEAL COOL & LUBE, CHK VLV	2 H-1	C	0.75 CHV	SEA	DE	EXEMPT PER IWV-1200(A)
81-187 LOOP 111 C.S. TOPPING PUMP SEAL COOL & LUBE CHK VLV	2 H-1	C	0.5 CHV	SEA	DE	EXEMPT PER IWV-1200(A)
81-188 LOOP 112 C.S. TOPPING PUMP SEAL COOL & LUBE CHK VLV	2 H-1	C	0.5 CHV	SEA	DE	EXEMPT PER IWV-1200(A)

SYSTEM: CORE SPRAY
DWG.NO: C-18007-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
81-189 LOOP 121 C.S. TOPPING PUMP SEAL COOL & LUBE ,CHK VLV	2 H-1	C	0.05 CHV	SEA	DE	EXEMPT PER IWV-1200(A)
81-190 LOOP 122 C.S. TOPPING PUMP SEAL,COOL & LUBE CHK VLV	2 H-1	C	0.5 CHV	SEA	DE	EXEMPT PER IWV-1200(A)
81-53 CRS PCV 111 MTR. CLR.	2 B-4	C	0.5 PGV	SEA	O	EXEMPT PER IWV-1200(A)

SYSTEM: CORE SPRAY
DWG.NO: C-18007-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
81-54 CRS PCV 112 MTR. CLR.	2 B-5	C	0.5 PGV	SEA	O	EXEMPT PER IWV-1200(A)
81-55 CRS PCV 121 MTR. CLR.	2 G-4	C	0.5 PGV	SEA	O	EXEMPT PER IWV-1200(A)
81-56 CRS PCV 122 MTR. CLR.	2 G-5	C	0.5 PGV	SEA	O	EXEMPT PER IWV-1200(A)

SYSTEM: CORE SPRAY
DWG.NO: C-18007-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
81-57 CRS TP #112 SEAL WTR. PCV	2 G-2	C	0.5 PGV	SEA	O	EXEMPT PER IWV-1200(A)
81-58 CRS TP #111 SEAL WTR. PCV	2 G-2	C	0.5 PGV	SEA	O	EXEMPT PER IWV-1200(A)
81-59 CRS TP #121 SEAL WTR. PCV	2 G-3	C	0.5 PGV	SEA	O	EXEMPT PER IWV-1200(A)

SYSTEM: CORE SPRAY
DWG.NO: C-18007-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
81-60 CRS TP #122 SEAL WTR. PCV	2 G-2	C	0.5 PGV	SEA	O	EXEMPT PER IWV-1200(A)

SYSTEM: EMERGENCY COOLING
DWG.NO: C-18017-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
05-02R EMERG. COND. VENT IV 11 TO MN. STM.	2 D-1	B	1.00 GLV	APA	O	DELETED LJ-R APP. J PROGRAM CHANGE
05-03R EMERG. COND. VENT IV 12 TO MN. STM.	2 D-1	B	1.00 GLV	APA	O	DELETED LJ-R APP. J PROGRAM CHANGE
39-11R LOOP 11 STM. LINE DRAIN IST IV	2 B-4	B	1.00 GTV	ADA	O	DELETED LJ-R APP. J PROGRAM CHANGE

SYSTEM: EMERGENCY COOLING
DWG.NO: C-18017-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
39-12R LOOP 11 STM. LINE DRAIN 2ND IV.	2 B-4	B	1.00 GTV	ADA	O	DELETED LJ-R APP. J PROGRAM CHANGE
39-13R LOOP 12 STM. LINE DRAIN 1ST LINE	2 G-4	B	1.00 GTV	ADA	O	DELETED LJ-R APP. J PROGRAM CHANGE
39-14R LOOP 12 STM. LINE DRAIN 2ND IV	2 G-4	B	1.00 GTV	ADA	O	DELETED LJ-R APP. J PROGRAM CHANGE

SYSTEM: EMERGENCY COOLING
DWG.NO: C-18017-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
60-13 TIE VLV BETWEEN EMERG. COND. M.U. TANKS	3 F-2	B	4.00 GLV	ADA	O	SAFETY-RELATED PASSIVE PER APPENDIX B 89-166 DETERMINATION

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: SHUTDOWN COOLING
DWG.NO: C-18018-C,SH. 1

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
						SAFETY-RELATED ACTIVE VALVES ARE INCLUDED IN THE IST PROGRAM PLAN; THERE ARE NO EXCLUSIONS. BEYOND THE SECOND CONTAINMENT ISOLATION VALVE, THE REACTOR SHUTDOWN COOLING SYSTEM IS NOT SAFETY-RELATED PER NMP1 "Q-LIST" AND "Q-BOUNDARY DRAWING".

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: CONTAINMENT SPRAY
DWG.NO: C-18012-C,SH.2

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
80-102A LP #111 CNT SP PUMP MOTOR COOLER RELIEF VALVE	2 H-3	C	0.50 REV	SEA	DE	SAFETY-RELATED PASSIVE PER APPENDIX B 89-163 DETERMINATION
80-102B LP #112 CNT SP PUMP MOTOR COOLER RELIEF VALVE	2 H-3	C	0.50 REV	SEA	DE	SAFETY-RELATED PASSIVE PER APPENDIX B 89-163 DETERMINATION
80-102C LP #121 CNT SP PUMP MOTOR COOLER RELIEF VALVE	2 H-3	C	0.50 REV	SEA	DE	SAFETY-RELATED PASSIVE PER APPENDIX B 89-163 DETERMINATION

SYSTEM: CONTAINMENT SPRAY
DWG.NO: C-18012-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
80-102D LP #122 CNT. SP. PUMP MOTOR COOLER RELIEF, VALVE	2 H-3	C	0.5 REV	SEA	DE	SAFETY-RELATED PASSIVE PER APPENDIX B 89-163 DETERMINATION
80-103A LP #111 C.S. PUMP MOTOR COOLER PCV	2 H-3	B	0.5 TPV	SEA	DE	EXEMPT PER IWV-1200(A)
80-103B LP #112 C.S. PUMP MOTOR COOLER PCV	2 H-3	B	0.5 TPV	SEA	DE	EXEMPT PER IWV-1200(A)

SYSTEM: CONTAINMENT SPRAY
DWG.NO: C-18012-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
80-103C LP #121 C.S. PUMP MOTOR COOLER PCV	2 H-3	B	0.5 TPV	SEA	DE	EXEMPT PER IWV-1200(A)
80-103D LP #122 C.S. PUMP MOTOR COOLER PCV	2 H-3	B	0.5 TPV	SEA	DE	EXEMPT PER IWV-1200(A)
80-114 C.S. TO RAD WASTE IV	2 H-2	B	4.00 PGV	MOA	C	DELETED LJ-R APP J PROGRAM CHANGE

SYSTEM: CONTAINMENT SPRAY
DWG.NO: C-18012-C,SH.2

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
80-115 C.S. TO RAD WASTE IV.	2 H-2	B	4.00 GLV	MOA	C	DELETED LJ-R APP J PROGRAM CHANGE
80-19 #112 CTN SP LOOP CHK VLV TO TORUS SPARGER	2 F-3	C	3.00 CHV	SEA	DE	DELETED PE-R; SEE CTS-RR-1
80-39 #111 CTN SP LOOP CHK VLV TO TORUS SPARGER	2 C-3	C	3.00 CHV	SEA	DE	DELETED PE-R; SEE CTS-RR-1

SYSTEM: CONTAINMENT SPRAY
DWG.NO: C-18012-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
80-40 BYPASS TO TORUS FOR LOOP #122	2 B-2	B	6.00 GTV	MAA	O	POWER OPERATOR REMOVED PER MOD 89-13/MWR M0087; MANUAL VALVE IS SAFETY-RELATED PASSIVE PER "Q LIST" AND APPENDIX "B" DETERMINATION NO. 91-47 REV. 1
80-45 BYPASS TO TORUS FOR LOOP #122	2 G-1	B	6.00 GTV	MAA	O	POWER OPERATOR REMOVED PER MOD 89-13/MWR M0087; MANUAL VALVE IS SAFETY-RELATED PASSIVE PER "Q LIST" AND APPENDIX "B" DETERMINATION NO. 91-47 REV. 1
80-66 #121 CTN SP LOOP CHK VLV TO TORUS SPARGER	2 C-2	C	3.00 CHV	SEA	DE	DELETED PE-R; SEE CTS-RR-1

SYSTEM: CONTAINMENT SPRAY
DWG.NO: C-18012-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
80-68 #122 CTN SP LOOP CHK VLV TO TORUS SPARGER	2 F-2	C	3.00 CHV	SEA	DE	DELETED PE-R; SEECTS-RR-1

SYSTEM: CONTAINMENT SPRAY
DWG.NO: C-18012-C,SH.1

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
93-52 C.S. RAW WATER BLK VLV	2 E-1	B	12.00 GTV	MOA	LO	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
93-58 CONT. SPRAY 12 TESTABLE CHECK	2 C-1	C	12.0 CHV	SEA/M	DE	DELETED LJ-R APP. J PROGRAM CHANGE
93-60 TSTABL CHK VLV RW TIE IN FROM RW LOOP #111	2 E-2	C	12.00 CHV	SEA/M	DE	DELETED LJ-R APP J PROGRAM CHANGE

SYSTEM: CONTAINMENT SPRAY
DWG.NO: C-18012-C,SH.1

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
93-62 TSTABL CHK VLV RW TIE IN FROM RW LOOP, #121	2 A-2	C	12.00 CHV	SEA/M	DE	DELETED LJ-R APP J PROGRAM CHANGE
93-64 CONT. SPRAY 12 TESTABLE CHECK	2 F-1	C	12.0 CHV	SEA/M	DE	DELETED LJ-R APP. J PROGRAM CHANGE
93-71 CONT. SPRAY 12 FLOW CONTROL	2 C-1	B	12.0 PGV	MOA	C	DELETED LJ-R APP. J PROGRAM CHANGE

SYSTEM: CONTAINMENT SPRAY
DWG.NO: C-18012-C,SH.1

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
93-72 FCV ON RW TIE IN FROM RW LOOP #112	2 E-2	B	12.00 PGV	MOA	C	DELETED LJ-R APP J PROGRAM CHANGE
93-73 FCV ON RW TIE IN FROM RW LOOP #121	2 A-2	B	12.00 PGV	MOA	C	DELETED LJ-R APP J PROGRAM CHANGE
93-74 CONT. SPRAY 12 FLOW CONTROL	2 F-1	B	12.0 PGV	MOA	C	DELETED LJ-R APP. J PROGRAM CHANGE

SYSTEM: REACTOR WATER CLEANUP
DWG.NO: C-18009-C,SH.1

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
33-145 (CU-PSV-1) RCU REGEN. HX	N D-3	C	0.75 REV	SEA	DE	THERMAL RELIEF VALVE FOR COMPONENT PROTECTION
35-26 CU PSV-4	2 G-2	C	8.00 REV	SEA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST". ASME CLASSIFICATION IS THE RESULT OF DISCHARGE SIDE OF VALVE FORMING ASME CL. 2/NON-ASME BOUNDARY IN REVERSE DIRECTION. PRESSURE RELIEF FUNCTION OF VALVE SERVES CLEANUP SYSTEM WHICH IS NON SAFETY-RELATED AND NON-ASME.
37-07R RV DRN.	1 B-1	B	2.00 GLV	MOA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: REACTOR WATER CLEANUP
DWG.NO: C-18009-C,SH.1

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
37-08R RV DRN.	1 B-2	B	2.00 GLV	MOA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
37-09R RV DRN.	1 B-2	B	2.00 GLV	MOA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
63-01 RBEDT BLOCK VALVE	2 H-2	B	1.00 GTV	SOA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST" AND APPENDIX "B" DETERMINATION NO. 91-047, REV. 1.

SYSTEM: REACTOR WATER CLEANUP
DWG.NO: C-18009-C,SH.1

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
63-04 POST-ACC. SMPL LINE RET IV	2 G-1	B	2.00 GLV	APA	O	SAFETY-RELATED PASSIVE PER APP "B" DETERMINATION NO. 91-47, REV. 1 AND DELETED LJ-R APP J PROGRAM CHANGE
63-05 POST-ACC. SMPL LINE RET IV	2 G-1	B	2.00 GLV	APA	O	SAFETY-RELATED PASSIVE PER APP "B" DETERMINATION NO. 91-47, REV. 1 AND DELETED LJ-R APP J PROGRAM CHANGE
63.1-01 RCU RELIEF TO TORUS I.V.	2 G-1	C	20.00 CHV	SEA	DE	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST" AND APPENDIX "B" DETERMINATION NO. 91-047, REV. 1

SYSTEM: REACTOR WATER CLEANUP
DWG.NO: C-18009-C,SH.1

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
63.1-02 RCU RELIEF TO TORUS I.V.	2 G-1	C	20.00 CHV	SEA	DE	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST" AND APPENDIX "B" DETERMINATION NO. 91-047, REV. 1
63.2-01 RCU VAC BRKR	2 H-2	C	0.75 SCV	SEA	C	SAFETY-RELATED PASSIVE PER APP "B" DETERMINATION NO. 91-047, REV. 1 AND DELETED LJ-R APP J PROGRAM CHANGE
63.2-02 RCU VAC BRKR	2 H-2	C	0.75 SCV	SEA	C	SAFETY-RELATED PASSIVE PER APP "B" DETERMINATION NO. 91-047, REV. 1 AND DELETED LJ-R APP J PROGRAM CHANGE

SYSTEM: REACTOR WATER CLEANUP
DWG.NO: C-18009-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
35-92 (SOV-22) FLT. AID FLUSH VLV.	3 G-2	B	0.5 GTV	SOA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
35-93 (SOV-21) FLT. AID FLUSH VLV.	3 F-2	B	0.5 GTV	SOA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
57-167 (ND-44) FLT. AID FLUSH WTR. PCV	3 F-2	C	0.5 TPV	SEA	C	EXEMPT PER IWV-1200(A)

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: INERT GAS PURGE AND FILL
DWG.NO: C-18014-C,SH.1

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
201-18 EMERG VNT FRM DRYWELL & TORUS B.B.	3 B-5	B	12.00 BFV	ADA	C	SAFETY-RELATED PASSIVE PER APP B 89-89 DETERMINATION
201-22 DISCHARGE BV OF EMERG. VENT & PURGE FAN	3 G-1	B	30.00 BFV	APA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
201.2-136 REAC. BLDG EMERG. VENT B.V.	3 G-3	B	3.00 PGV	APA	C	SAFETY-RELATED PASSIVE PER APP B 89-89 DETERMINATION

SYSTEM: INERT GAS PURGE AND FILL
DWG.NO: C-18014-C,SH.1

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
201.2-531 EMERG. VENT SYS. PCV	3 G-2	B	4.00 GLV	ADA	O	EXEMPT PER IWV-1200(A)
201.2-532 EMERG. VENT SYS. PCV	3 C-2	B	4.00 GLV	ADA	O	EXEMPT PER IWV-1200(A)

SYSTEM: HYDROGEN-OXYGEN MONITORING
DWG.NO: C-26939-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
201.2-282 H2/O2 #12 B.V.	N E-3	B	0.5 GLV	ADA	O	TESTING THIS VALVE WOULD BE A BURDEN (E.G., REQUIRING SIGNIFICANT DEVIATIONS FROM NORMAL OPERATIONS) TO DISCONNECT CONTROL CIRCUITRY IN ORDER TO PERMIT INDIVIDUAL VALVE OPERATION/TESTING.
201.2-283 H2/O2 #12 GAS SUPPLY B.V.	N E-3	B	.25 GLV	ADA	C	TESTING THIS VALVE WOULD BE A BURDEN (E.G., REQUIRING SIGNIFICANT DEVIATIONS FROM NORMAL OPERATIONS) TO DISCONNECT CONTROL CIRCUITRY IN ORDER TO PERMIT INDIVIDUAL VALVE OPERATION/TESTING.
201.2-286 H2/O2 #12 UPSTREAM PCV	N E-3	B	0.5 GLV	ADA	O	EXEMPT PER IWV-1200(A)

SYSTEM: HYDROGEN-OXYGEN MONITORING
DWG.NO: C-26939-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
201.2-287 H2/O2 #12	N E-2	B	0.5 GLV	ADA	O	EXEMPT PER IWV-1200(A)
201.2-298 H2/O2 #12 DOWNSTREAM PCV	N G-3	B	0.5 GLV	ADA	O	EXEMPT PER IWV-1200(A)
201.2-302 SAMPLE PUMP	N G-3	NA	NA NA	NA	NA	NON-SAFETY-RELATED AND NOT PART OF REG. GUIDE 1.97 COMMITMENT.

SYSTEM: HYDROGEN-OXYGEN MONITORING
DWG.NO: C-26939-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
201.2-332 CALIB. GAS SUPPLY CHECK VALVE	N E-3	C	.25 CHV	SEA	C	TESTING THIS VALVE WOULD BE A BURDEN (E.G., REQUIRING SIGNIFICANT DEVIATIONS FROM NORMAL OPERATIONS) TO DISCONNECT CONTROL CIRCUITRY IN ORDER TO PERMIT INDIVIDUAL VALVE OPERATION/ TESTING.
201.2-413 H2/O2 #12 SAMPLE RETURN	N H-3	B	0.5 TWV	ADA	O	DELETE ST-Q AS NON-ASME BUT OPERATIONAL READINESS OF VALVE (RG.1.97) DEMONSTRATED BY FE-Q. IN ADDITION PER APP B DETERMINATION 90-206, REV. 1, IT IS IRRELEVANT WHICH WAY (TO DRYWELL OR TO TORUS) THE VALVE WILL FAIL OPEN AND SO IS NOT A SAFETY-RELATED FUNCTION.

SYSTEM: HYDROGEN-OXYGEN MONITORING
DWG.NO: C-26949-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
201.2-169 H2/O2 #11 B.V.	N E-3	B	0.5 GLV	ADA	O	TESTING THIS VALVE WOULD BE A BURDEN (E.G., REQUIRING SIGNIFICANT DEVIATIONS FROM NORMAL OPERATIONS) TO DISCONNECT CONTROL CIRCUITRY IN ORDER TO PERMIT INDIVIDUAL VALVE OPERATION/ TESTING.
201.2-170 H2/O2 #11 CALIB. GAS SUPPLY B.V.	N E-3	B	.25 GLV	ADA	C	TESTING THIS VALVE WOULD BE A BURDEN (E.G., REQUIRING SIGNIFICANT DEVIATIONS FROM NORMAL OPERATIONS) TO DISCONNECT CONTROL CIRCUITRY IN ORDER TO PERMIT INDIVIDUAL VALVE OPERATION/ TESTING.
201.2-173 H2/O2 #11 UPSTREAM PCV	N E-3	B	0.5 GLV	ADA	O	EXEMPT PER IWV-1200(A)

SYSTEM: HYDROGEN-OXYGEN MONITORING
DWG.NO: C-26949-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
201.2-174 H2/O2 #11	N E-2	B	0.5 GLV	ADA	C	EXEMPT PER IWV-1200(A)
201.2-185 H2/O2 #11 DOWNSTREAM PCV	N G-3	B	0.5 GLV	ADA	O	EXEMPT PER IWV-1200(A)
201.2-189 SAMPLE PUMP	N G-3	NA	NA NA	NA	NA	NON-SAFETY-RELATED AND NOT PART OF REG. GUIDE 1.97 COMMITMENT.

SYSTEM: HYDROGEN-OXYGEN MONITORING
DWG.NO: C-26949-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
201.2-246 CALIB. GAS SUPPLY CHECK VALVE	N E-3	C	.25 CHV	SEA	C	TESTING THIS VALVE WOULD BE A BURDEN (E.G., REQUIRING SIGNIFICANT DEVIATIONS FROM NORMAL OPERATIONS) TO DISCONNECT CONTROL CIRCUITRY IN ORDER TO PERMIT INDIVIDUAL VALVE OPERATION/ TESTING.
201.2-414 H202 SYS. #11 SAMPLE RETURN TO CONT.	N L-4	B	0.5 TWA	ADA	O	DELETED ST-Q AS NON ASME BUT OPERATIONAL READINESS OF VALVE (RG 1.97) DEMONSTRATED BY FE-Q. IN ADDITION PER APPENDIX B DETERMINATION 90-206, REV. 1, IT IS IRRELEVANT WHICH WAY (TO DRYWELL OR TO TORUS) THE VALVE WILL FAIL OPEN AND IS NOT A SAFETY RELATED FUNCTION.

SYSTEM: TIP
DWG.NO: C-18014-C,SH.2

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
						SAFETY-RELATED VALVES ARE INCLUDED IN THE IST PROGRAM PLAN; THERE ARE NO EXCLUSIONS.

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: N2 SUPPLY #11
DWG.NO: C-18014-C,SH.3

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
201.9-08 TK 201.9-01 VAC PS,DISC	3 C-3	D	.75 REV	SEA	C	EXEMPT PER IWV-3620 (NON-TESTABLE).
201.9-16 AMB. VAP N2 SUPPLY FCV	3 D-3	B	.25 GTV	NDA	O	EXEMPT PER IWV-1200(A)
201.9-35 AMB. VAP N2 SUPPLY FCV	3 D-4	B	.25 GTV	NDA	O	EXEMPT PER IWV-1200(A)

SYSTEM: N2 SUPPLY #11
DWG.NO: C-18014-C,SH.3

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
201.9-38 N2 PRESS. BLD. CAL. PCV	3 D-4	B	1.50 GTV	NDA	O	EXEMPT PER IWV-1200(A)
201.9-48 N2 PCV	3 F-3	B	1.00 GLV	NDA	O	EXEMPT PER IWV-1200(A)
201.9-49 N2 FCV	3 G-3	B	1.00 GLV	NDA	O	EXEMPT PER IWV-1200(A)

SYSTEM: N2 SUPPLY #12
DWG.NO: C-18014-C,SH.4

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
201.8-01 N2 PCV	3 E-4	B	1.00 GLV	ADA	DE	EXEMPT PER IWV-1200(A)
201.8-02 N2 FCV	3 F-5	B	1.00 GLV	ADA	DE	EXEMPT PER IWV-1200(A)
201.8-10 PSV,INLET SIDE OF 201.8-04	3 D-2	C	0.50 REV	SEA	C	SAFETY-RELATED PASSIVE PER APP B89-42R1 AND 89-45 DETERMINATION

SYSTEM: N2 SUPPLY #12
DWG.NO: C-18014-C,SH.4

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
201.8-107 PRESS. BUILDUP COIL IN PCV (SSI-36)	3 C-4	C	0.5 GLV	NDA	O	EXEMPT PER IWV-1200(A)
201.8-11 PSV,INLET SIDE OF 201.8-04	3 D-3	C	0.50 REV	SEA	C	SAFETY-RELATED PASSIVE PER APP B89-42R1 AND 89-45 DETERMINATION
201.8-12 PSV,DISCH SIDE OF GOOD SCFH AMB. VAPORIZER	3 D-4	C	0.50 REV	SEA	C	SAFETY-RELATED PASSIVE PER APP B89-42R1 AND 89-45 DETERMINATION

SYSTEM: N2 SUPPLY #12
DWG.NO: C-18014-C,SH.4

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
201.8-13 PSV AFTER PSV 201.8-01	3 F-4	C	1.00 REV	SEA	C	SAFETY-RELATED PASSIVE PER APP B89-42R1 AND 89-45 DETERMINATION
201.8-14 PSV AFTER PSV 201.8-02	3 G-14	C	1.00 REV	SEA	O	SAFETY-RELATED PASSIVE PER APP B89-42R1 AND 89-45 DETERMINATION
201.8-57 N2 PRESS. AMB. VAP. PCV	3 C-3	B	0.5 GLV	NDA	O	EXEMPT PER IWV-1200(A)

SYSTEM: N2 SUPPLY #12
DWG.NO: C-18014-C,SH.4

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
201.8-94 TK. 12 VAC SPACE RELIEF (PS DISC [1])	3 B-4	D	.75 REV	SEA	C	EXEMPT PER IWV-3620 (NON-TESTABLE)
201.8-97 TK. 12 N2 SPACE RELIEF (PS DISC [1])	3 C-2	D	.75 REV	SEA	C	EXEMPT PER IWV-3620 (NON-TESTABLE)
201.8-99 N2 STORAGE TK #12 RETURN PCV (SSI-38)	3 C-3	C	0.5 GLV	NDA	O	EXEMPT PER IWV-1200(A)

SYSTEM: N2 SUPPLY #12
DWG.NO: C-18041-C,SH.9

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
201.12-01 PCV FOR DILUTION STATION	3 A-1	C	.75 GLV	NDA	DE	EXEMPT PER IWV-1200(A)

SYSTEM: RBHVAC
DWG.NO: C-18013-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
202-47 CROSS-TIE VALVE	3 G/H-4	B	2.00 BFV	ADA	C	ON P&ID C-18013-C, DELETE ST-Q IN CLOSED DIRECTION AS THE VALVE'S SAFETY FUNCTION IS ONLY IN THE OPEN DIRECTION (SEE PR-1999).

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: RBHVAC
DWG.NO: C-18021-C,SH.1

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
203-14(BV-X-14) TURB. BLDG. EXH. FAN OUTLET DAMPER	N G-3	B	14.00 DAMPER	APA	O	DAMPER
203-15(BV-X-15) TURB. BLDG. EXH. FAN OUTLET DAMPER	N G-4	B	14.00 DAMPER	APA	C	DAMPER

SYSTEM: RBHVAC
DWG.NO: C-18021-C,SH.3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
203-132 OFF-GAS EXH. FAN OUTLET DAMPER	N H-3	B	22.00 DAMPER	ADA	O	DAMPER
203-133 OFF-GAS EXH. FAN OUTLET DAMPER	N H-5	B	22.00 DAMPER	ADA	C	DAMPER

SYSTEM: LIQUID POISON
DWG.NO: C-18019-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
						SAFETY-RELATED COMPONENTS ARE INCLUDED IN THE IST PROGRAM PLAN; THERE ARE NO EXCLUSIONS.

SYSTEM: SFSPFC
DWG.NO: C-18008-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
49-53 F.P. CNDSR BV	3 H-2	B	8.00 TPV	APA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
54-14 FILTER #12 FCV OUTLET VLV	3 F-5	B	6.00 BFV	ADA	DE	EXEMPT PER IWV-1200(A)
54-15 FILTER #11 FCV OUTLET VLV	3 F-4	B	6.00 BFV	ADA	DE	EXEMPT PER IWV-1200(A)

SYSTEM: SFSPFC
DWG.NO: C-18008-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
54-16 F.P. RET. BV	3 H-1	B	6.00 TPV	APA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
54-17 SPENT FUEL PUMP SUCTION VALVE	3 B-4	B	10.00 GTV	APA	O	SAFETY-RELATED PASSIVE PER APP B89-89 DETERMINATION
54-18 SPENT FUEL PUMP SUCTION VALVE	3 A-4	B	10.00 GTV	APA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: SFSPFC
DWG.NO: C-18008-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
54-34 F.P. FLT. 11 SLG. T.K. BV	3 F-4	B	8.00 BFV	APA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
54-35 F.P. FLT. 12 SLG. T.K. BV	3 E-5	B	8.00 BFV	APA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
54-37 F.P. FLT. 11 PREC. IN BV	3 F-4	B	3.00 BFV	ADA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: SFSPFC
DWG.NO: C-18008-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
54-38 F.P. FLT. 12 PREC. IN BV	3 E-5	B	3.00 BFV	ADA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
54-39 F.P. FLT. 11 PREC. DISC BV	3 F-4	B	3.00 BFV	ADA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
54-40 F.P. FLT. 12 PREC. DISC BV	3 F-5	B	3.00 BFV	ADA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: SFSPFC
DWG.NO: C-18008-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
54-49 PUMP SUCTION CHECK VALVE	3 A-4	C	8.00 CHV	SEA	DE	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
54-66 CT-31 F.P. FLT. 11 IN. CHV	3 F-4	C	3.00 CHV	SEA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
54-67 CT-32 F.P. FLT. 12 IN. CHV	3 F-5	C	3.00 CHV	SEA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: SFSPFC
DWG.NO: C-18008-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
57-25 FUEL POOL MAKEUP NORMAL LCV	3 C-2	B	3.00 GLV	ADA	C	EXEMPT PER IWV-1200(A)
57-26 C.T. F.P. FLT. 11 IN. BV	3 F-3	B	3.00 BFV	ADA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
57-27 C.T. F.P. FLT. 12 IN. BV	3 F-5	B	3.00 BFV	ADA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: SFSPFC
DWG.NO: C-18008-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
57-58 SURGE TANK MAKEUP BACKUP LCV	3 E-2	B	3.00 GLV	ADA	C	EXEMPT PER IWV-1200(A)
57.1-01 F.P. FLT. SLG. PP. C.T. BV	3 E-6	B	1.50 TPV	ADA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
85-160 WASTE DISPOSAL BV	3 H-2	B	6.00 GLV	ADA	C	SAFETY-RELATED PASSIVE PER APP "B" DETERMINATIONS NO. 89-42R1 AND 89-89

SYSTEM: SAMPLE
DWG.NO: C-18041-C,SH.2 & 7

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
110-83 NON-REGEN. SAMPLE COOLER BV	3 C-5	B	.25 TPV	APA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
110-84 RX SAMPLE COOLER BV	3 B-1	B	.25 TPV	APA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
110-85 RX SAMPLE COOLER BV	3 B-2	B	.25 TPV	APA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: SAMPLE
DWG.NO: C-18041-C,SH.2 & 7

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
110-86 RX SAMPLE COOLER BV	3 B-3	B	.25 TPV	APA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: RBCLCW
DWG.NO: C-18009-C,SH.1

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-376 (PSV) NON REGEN. HEAT EXCH.	3 E-3	C	1.50 REV	SEA	DE	THERMAL RELIEF VALVE FOR COMPONENT PROTECTION

SYSTEM: RBCLCW
DWG.NO: C-18018-C,SH.1

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-347 SHUTDOWN COOLING HX#11 PSV (NU01A)	3 D-1	C	3X4 REV	SEA	DE	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-348 SHUTDOWN COOLING HX#12 PSV (NU01B)	3 D-3	C	3X4 REV	SEA	DE	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-349 SHUTDOWN COOLING HX#13 PSV (NU01C)	3 D-4	C	3X4 REV	SEA	DE	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: RBCLCW
DWG.NO: C-18018-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-100 RECIRC. PP 12 CLR. IN. BV	2 C-1	B	2.00 GLV	SOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: RBCLCW
DWG.NO: C-18022-C,SH.1

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
72-146 DISCH. M'FOLD TCV	3 C-1	B	17.00 GLV	APA	DE	THESE CONTROL VALVES DO NOT HAVE A TRUE FAILSAFE FEATURE (E.G., SPRINGS) AS THEY RELY ON FLOW TO MOVE THE DISC. SEE SAFETY EVALUATION NO. 90-013. MECHANICAL STOPS HAVE ALSO BEEN INSTALLED TO ENSURE VALVE POSITION REMAINS WITHIN DESIGN REQUIREMENTS.

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: RBCLCW
DWG.NO: C-18022-C,SH.2

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-102 RECIRC. PP 13 CLR. IN. BV	2 C-2	B	2.00 GLV	SOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-104 RECIRC. PP 14 CLR. IN. BV	2 C-3	B	2.00 GLV	SOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-106 RECIRC. PP 15 CLR. IN. BV	2 C-3	B	2.00 GLV	SOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: RBCLCW
DWG.NO: C-18022-C,SH.2

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-118 DRYWELL AIR CLR. 11 IN. BV	2 D-4	B	3.00 GLV	SOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-120 DRYWELL AIR CLR. 12 IN. BV	2 D-1	B	3.00 GLV	SOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-122 DRYWELL AIR CLR. 13 IN. BV	2 D-2	B	3.00 GLV	SOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: RBCLCW
DWG.NO: C-18022-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-124 DRYWELL AIR CLR. 14 IN. BV	2 D-2	B	3.00 GLV	SOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-126 DRYWELL AIR CLR. 15 IN. BV	2 D-3	B	3.00 GLV	SOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-128 DRYWELL AIR CLR. 16 IN. BV	2 D-3	B	3.00 GLV	SOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: RBCLCW
DWG.NO: C-18022-C,SH.2

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-130 DRYWELL EQ. DRN. SUMP 11 CLR. IN.	2 D-1	B	3.00 GLV	SOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-137 RBCLC HX MANIFOLD TCV PSV	3 G-6	B	20.00 BFV	APA	DE	THESE CONTROL VALVES DO NOT HAVE A TRUE FAILSAFE FEATURE (E.G., SPRINGS) AS THEY RELY ON FLOW TO MOVE THE DISC. SEE SAFETY EVALUATION NO. 90-013. MECHANICAL STOPS HAVE ALSO BEEN INSTALLED TO ENSURE VALVE POSITION REMAINS WITHIN DESIGN REQUIREMENTS.
70-263 RECIRC. PP 11 CLR OUT	2 B-1	C	2.00 CHV	SEA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: RBCLCW
DWG.NO: C-18022-C,SH.2

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-264 RECIRC. PP 12 CLR OUT	2 B-1	C	2.00 CHV	SEA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-265 RECIRC. PP 13 CLR OUT	2 C-2	C	2.00 CHV	SEA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-266 RECIRC. PP 14 CLR OUT	2 C-3	C	2.00 CHV	SEA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: RBCLCW
DWG.NO: C-18022-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-267 RECIRC. PP 15 CLR OUT	2 C-3	C	2.00 CHV	SEA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-27 DRYWELL AIR CLR 11 OUT	2 D-3	C	3.00 CHV	SEA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-28 DRYWELL AIR CLR 16 OUT	2 D-3	C	3.00 CHV	SEA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: RBCLCW
DWG.NO: C-18022-C,SH.2

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-29 DRYWELL AIR CLR 15 OUT	2 D-3	C	3.00 CHV	SEA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-30 DRYWELL AIR CLR 14 OUT	2 D-2	C	3.00 CHV	SEA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-31 DRYWELL AIR CLR 13 OUT	2 D-2	C	3.00 CHV	SEA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: RBCLCW
DWG.NO: C-18022-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-32 DRYWELL AIR CLR 12 OUT	2 D-1	C	3.00 CHV	SEA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-35 DRYWELL EQ. DRN. SUMP 12 CLR. IN. BV	2 D-2	B	3.00 GLV	SOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-360 DRYWELL EQ DRN SUMP 12 CLR OUT (BR-C-6)	2 D-2	C	1.50 CHV	SEA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: RBCLCW
DWG.NO: C-18022-C,SH.2

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-362 DRYWELL EQ DRN SUMP 11 CLR OUT (BR-C-6)	2 D-1	C	1.50 CHV	SEA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-364 DW AIR COOLER #11 RV (BR-SV-3)	3 D-3	C	.75 REV	SEA	DE	THERMAL RELIEF VALVE FOR COMPONENT PROTECTION
70-365 DW AIR COOLER #16 RV (BR-SV-3)	3 D-3	C	.75 REV	SEA	DE	THERMAL RELIEF VALVE FOR COMPONENT PROTECTION

SYSTEM: RBCLCW
DWG.NO: C-18022-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-366 DW AIR COOLER #15 RV (BR-SV-3)	3 D-3	C	.75 REV	SEA	DE	THERMAL RELIEF VALVE FOR COMPONENT PROTECTION
70-367 DW AIR COOLER #14 RV (BR-SV-3)	3 D-2	C	.75 REV	SEA	DE	THERMAL RELIEF VALVE FOR COMPONENT PROTECTION
70-368 DW AIR COOLER #13 RV (BR-SV-3)	3 D-2	C	.75 REV	SEA	DE	THERMAL RELIEF VALVE FOR COMPONENT PROTECTION

SYSTEM: RBCLCW
DWG.NO: C-18022-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-369 DW AIR COOLER #12 RV (BR-SV-3)	3 D-1	C	.75 REV	SEA	DE	THERMAL RELIEF VALVE FOR COMPONENT PROTECTION
70-53 S.D.C. HX OUTLET VALVE	2 H-4	B	14.00 TPV	APA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
70-87 R.B. EQ. DRN. TK. CLG. COIL	3 A-1	B	2.00 TPV	ADA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: RBCLCW
DWG.NO: C-18022-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-98 RECIRC. PP 11 CLR. IN. BV	2 C-1	B	2.00 GLV	SOA	O	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: RBCLCW
DWG.NO: C-18045-C,SH.3

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-82 CONCENTRATED WASTE TANK #11 OUTLET VALVE	2 F-2	B	2.00 TPV	ADA	C	NOT SAFETY-RELATED PER NMP1 "Q-LIST"

SYSTEM: RBCLCW
DWG.NO: C-26939-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-222 H2/O2 #12 SAMPLE, COOLER B.V.	3 C-4	B	0.5 GLV	ADA	C	TESTING THIS VALVE WOULD BE A BURDEN (E.G., REQUIRING SIGNIFICANT DEVIATIONS FROM NORMAL OPERATIONS) TO DISCONNECT CONTROL CIRCUITRY IN ORDER TO PERMIT INDIVIDUAL VALVE OPERATION/ TESTING. EXEMPTED PER IWV-1200(A).

SYSTEM: RBCLCW
DWG.NO: C-26949-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
70-212 H2/O2 #11 SAMPLE COOLER B.V.	3 C-4	B	0.5 GLV	ADA	C	TESTING THIS VALVE WOULD BE A BURDEN (E.G., REQUIRING SIGNIFICANT DEVIATIONS FROM NORMAL OPERATIONS) TO DISCONNECT CONTROL CIRCUITRY IN ORDER TO PERMIT INDIVIDUAL VALVE OPERATION/ TESTING. EXEMPTED PER IWV-1200(A).

SYSTEM: CONDENSATE TRANSFER
DWG.NO: C-18003-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
53-08 COND. STORAGE TO CRD CHECK VALVE	3 G-6	C	4.00 CHV	SEA	DE	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: CONDENSATE TRANSFER
DWG.NO: C-18035-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
57-103 CT. RES. FLUSH (BV-11)	3 B-2	B	3.00 TPV	APA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
57-104 CT. RES. FLUSH (BV-12)	3 C-2	B	3.00 TPV	APA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
57-183 (AO) RES. TRANS. TO CLEANUP DEMINERALIZERS	3 C-4	B	2.00 TPV	APA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: CONDENSATE TRANSFER
DWG.NO: C-18035-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
57-184 (AO) RES. TRANS. TO CONDENSATE DEMINERALIZERS	3 C-4	B	2.00 TPV	APA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: CONDENSATE TRANSFER
DWG.NO: C-18036-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
91-11 COND. PUMP SEAL WTR. PCV	3 G-2	B	.75 TPV	SEA	O	EXEMPT PER IWV-1200(A); SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST".
91-112 SFP PUMPS SEAL WTR. PCV	3 B-5	B	1.00 TPV	SEA	O	EXEMPT PER IWV-1200(A); SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST".

SYSTEM: CONDENSATE TRANSFER
DWG.NO: C-18048-C

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
57-22 COND. TRANS. F.P. FILT. CK. VALVE	3 B-4	C	3.00 CHV	SEA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
57-23 COND. TRANS. CLEANUP CK. VALVE	3 B-5	C	3.00 CHV	SEA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"
57-57 COND. TRANSFER SYS SFTY VLV SRG/STRG TANK	3 B-5	C	3X4 REV	SEA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: CONDENSATE TRANSFER
DWG.NO: C-18008-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
57.1-03 COND. TRANS. CLEANUP CK. SLUDGE PMP B.V.	3 D-6	B	1.50 TPV	ADA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: TORUS VAC. RELIEF
DWG.NO: C-18006-C,SH.2

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
						SAFETY-RELATED COMPONENTS ARE INCLUDED IN THE IST PROGRAM PLAN. THERE ARE NO EXCLUSIONS.

SYSTEM: EMERGENCY SERVICE WATER
DWG.NO: C-18022-C,SH.3;C-18027-C,SH.2

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
						SAFETY-RELATED COMPONENTS ARE INCLUDED IN THE IST PROGRAM PLAN. THERE ARE NO EXCLUSIONS.

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: EMERGENCY DIESEL GEN. COOLING
DWG.NO: C-18026-C,SH.1,2

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
						SAFETY-RELATED COMPONENTS ARE INCLUDED IN THE IST PROGRAM PLAN. THERE ARE NO EXCLUSIONS.

SYSTEM: EMERGENCY DSL. GEN. AIR START
DWG.NO: C-18026-C,SH.1

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
96-28 AIR START PRESS., CONT. VALVE	N H-3	B	1.5 GLV	SEA	DE	EXEMPT PER IWV-1200(A)

SYSTEM: EMERGENCY DSL. GEN. AIR START
DWG.NO: C-18026-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
96-52 AIR START PRESS., CONT. VALVE	N H-3	B	1.5 GLV	SEA	DE	EXEMPT PER IWV-1200(A)

SYSTEM: EMERG. DSL. GEN. F.O. TRANSFER
DWG.NO: C-18026-C,SH.1

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
82-62 EDG 102 FUEL OIL XFER PSV (PSV-GM-102)	N C-2	C	.25 REV	SEA	C	THIS RELIEF VALVE IS INTERNAL TO THE EDG FUEL OIL XFER PUMP AND WAS SUPPLIED BY THE PUMP MFR. NOT KNOWING THE SYSTEM CONFIGURATION. BOTH THE F.O. STORAGE TANK AND DAY TANK ARE VENTED TO ATMOSPHERETHUS NOT REQUIRING OVER-PRESSURE PROTECTION.

SYSTEM: EMERG. DSL. GEN. F.O. TRANSFER
DWG.NO: C-18026-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
82-63 EDG 103 FUEL OIL XFER PSV (PSV-GM-103)	N A-2	C	.25 REV	SEA	C	THIS RELIEF VALVE IS INTERNAL TO THE EDG FUEL OIL XFER PUMP AND WAS SUPPLIED BY THE PUMP MFR. NOT KNOWING THE SYSTEM CONFIGURATION. BOTH THE F.O. STORAGE TANK AND DAY TANK ARE VENTED TO ATMOSPHERETHUS NOT REQUIRING OVER-PRESSURE PROTECTION.

SYSTEM: WASTE DISPOSAL
DWG.NO: C-18045-C,SH.7 & 9

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
						SAFETY-RELATED VALVES ARE INCLUDED IN THE IST PROGRAM PLAN; THERE ARE NO EXCLUSIONS.

COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: BREATHING AIR TO DRYWELL
DWG.NO: C-18578-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
						SAFETY-RELATED VALVES ARE INCLUDED IN THE IST PROGRAM PLAN; THERE ARE NO EXCLUSIONS.

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: C.R. CHILLED WATER
DWG.NO: C-18047-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
210.1-29 EXPANSION TANK PCV	N F-1	B	.75 GTV	SEA	DE	EXEMPT PER IWV-1200(A)
210.1-31 EXPANSION TANK PSV	N F-1	C	1.00 REV	SEA	DE	THERMAL RELIEF VALVE FOR COMPONENT PROTECTION

SYSTEM: C.R. CHILLED WATER
DWG.NO: C-18021-C,SH.1

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
210.1-62 CHILL WTR. TO LAB.TCV	2 D-2	B	2.50 TWV	MOA	DE	EXEMPT PER IWV-1200(A); PASSIVE 88-030C

SYSTEM: C.R. CHILLED WATER
DWG.NO: C-18046-C,SH.1

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
210.1-73 CHILL WTR. TO ADMIN. BLDG. TCV	2 B-2	B	2.50 TWV	MOA	DE	EXEMPT PER IWV-1200(A); PASSIVE 88-030C

NINE MILE POINT UNIT 1
APPENDIX A
COMPONENT EXCLUSION/JUSTIFICATION TABLE

SYSTEM: CONTROL ROOM HVAC
DWG.NO: C-18047-C

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
						SAFETY-RELATED VALVES ARE INCLUDED IN THE IST PROGRAM PLAN; THERE ARE NO EXCLUSIONS. ALTERNATE TESTING OF CONTROL ROOM HVAC SYSTEM DAMPERS AND CONTROL ROOM LEAKAGE INTEGRITY IS VERIFIED UNDER OPERATOR SURV. TEST PROCEDURE NO. N1-ST-C9.

SYSTEM: INSTRUMENT AIR
DWG.NO: C-18011-C,SH.1

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
94-19 SERVICE AIR RECEIVER B.V. TRIP VALVE	N F-4	B	2.00 GLV	ADA	C	EXEMPT PER IWV-1200(A)
94-49 SERVICE AIR HEADER CK VLV.	N F-4	C	2.00 CHV	SEA	C	SAFETY-RELATED PASSIVE PER NMP1 "Q-LIST"

SYSTEM: INSTRUMENT AIR
DWG.NO: C-18011-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
94-07 I.A. COMPRESSOR #11 TCV	3 B-1	B	.75 GLV	ADA	DE	EXEMPT PER IWV-1200(A)
94-08 I.A. COMPRESSOR #12 TCV	3 B-4	B	.75 GLV	ADA	DE	EXEMPT PER IWV-1200(A)
94-09 INTERCOOLER #3 INLET VLV.	3 C-1	B	.75 GTV	SOA	DE	THIS VALVE IS A SKID-MOUNTED COMPONENT AND IS INTERLOCKED WITH THE INSTRUMENT AIR COMPRESSOR OPERATION. ALSO, THIS VALVE HAS NO MEANS OF DETERMINING VALVE POSITION. THIS VALVE SHALL BE OPERABILITY ASSESSED DURING NORMAL COMP. OPERATION

SYSTEM: INSTRUMENT AIR
DWG.NO: C-18011-C,SH.2

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
94-10 INTERCOOLER #4 INLET VLV.	3 C-3	B	.75 GTV	SOA	DE	THIS VALVE IS A SKID-MOUNTED COMPONENT AND IS INTERLOCKED WITH THE INSTRUMENT AIR COMPRESSOR OPERATION. ALSO, THIS VALVE HAS NO MEANS OF DETERMINING VALVE POSITION. THIS VALVE SHALL BE OPERABILITY ASSESSED DURING NORMAL COMP. OPERATION

SYSTEM: INSTRUMENT AIR
DWG.NO: C-18016-C,SH.2

NMP1-IST-001
REVISION 3

COMPONENT NUMBER	CLASS & DWG.COOR.	VALVE (CAT)	SIZE (IN) AND TYPE	ACTU TYPE	NORM POS.	JUSTIFICATION
113-77 I.A. PCV FOR SCRAM DISCH. VNT & DRN VLVS	N B-4	B	0.5 GLV	SEA	DE	EXEMPT PER IWV-1200(A)
113-78 I.A. PCV FOR SCRAM DISCH. VNT & DRN VLVS	N B-4	B	0.5 GLV	SEA	DE	EXEMPT PER IWV-1200(A)